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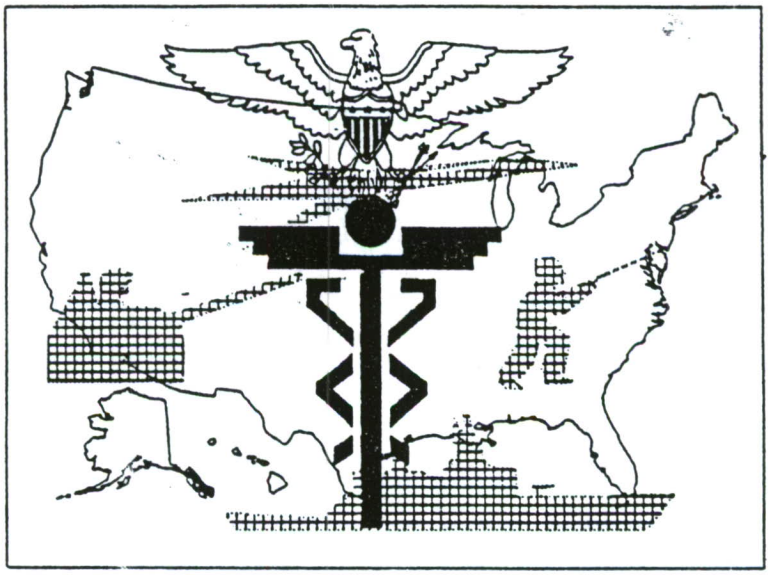

REPORT TO CONGRESS
ON ARMED FORCES
HEALTH PROFESSIONALS SPECIAL PAYS

Military Nurse Corps

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EXECUTIVE SUMMARY

This supplement to the Report to Congress on Health Professionals Special Pays, issued December 1, 1988, reviews issues of recruiting, retention, and management of active duty nurses in the Armed Forces today. The report recommends initiatives, including proposed legislation, to assist in solving incipient problems.

Nurses are essential members of the Military Health Services System (MHSS), and are vital to access to health care and to delivery of quality patient care. Registered nurses today function in a profession characterized by rapid advances in theory, knowledge, and technology. Requirements for complex and intensive nursing services demand highly skilled and experienced nurse professionals. Additionally, military nurses not only practice in a highly demanding clinical role, but further serve as military officers with requirements for training, leadership, and management in military skills.

The nursing environment nationwide affects military nursing. The civilian medical community has a shortage of registered nurses which is recognized as real and widespread, affecting all health care delivery settings, including the military. The challenge for the Department of Defense (DoD) and the Congress is to evaluate the impact of the nationwide shortage and to respond in an effective manner which will prevent serious adverse effects on military health care in years ahead.

Legislative measures and service regulations have historically enabled the Military Departments to take required actions to enhance the status, pay, and benefits of military nurses in response to problems with recruitment, retention, and morale. Appropriate new legislative authorities are now necessary to prevent erosion of the military nurse inventory and a concomitant decrease in access to, and quality of, health care.

Requirements standards demonstrate a need for additional commissioned nurse officers in the Department of Defense. The DoD has a shortage of active component nurses compared to authorizations. Additional active duty nurses are also needed for the Department to implement cost-saving recapture of much of the inpatient hospital workload now treated under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Finally, there is a requirement for additional nurses, using the proposed Joint Health Care Manpower Standards based on analysis of historical levels of patient illness and intensity of nursing care required.

The Department not only has need for additional commissioned nurses, but due to

the increasing complexity of the nursing profession, has a growing demand for experienced nurses, especially those with 7 to 15 years of experience. Retention rates that permit maturation of the force, and accession of adequate numbers of experienced nurses based on effective use of constructive service credit, will meet the demand for a mature force. The Department will continue to give priority to definition of nurse corps management issues and validation of nurse corps billet structures, as well analysis of the need for potential legislative authorities.

Recruiting adequate numbers of nurses has recently become more difficult for the Military Departments. The Navy Nurse Corps has failed to meet accession goals since 1985 and the Army did not meet accession goals in 1988. Accessions for each Service for the first part of Fiscal Year 1989 are falling below accessions for the comparable period of Fiscal Year 1988 (7 percent of Fiscal Year 1989 goal, which is only slightly higher, compared to 17 percent at the end of the first quarter Fiscal Year 1988). All Military Departments are affected. As the supply of nursing school graduates declines and the competition for qualified nurses intensifies, military service must remain competitive with the civilian nurse labor market for both new graduate and experienced nurses.

Retention of nurses is another area of concern. Many factors affect the decision to remain in the military. In addition to dissatisfaction with promotion opportunities, results of recent surveys of military nurses have highlighted quality of life issues. Sources of dissatisfaction include concern about nurse staffing levels, erosion of pay and benefits, and lack of support personnel. A combination of these factors and increasingly attractive civilian salaries may account for the recent downward trend in retention now beginning to be observed at the point of initial obligation.

Some specialties are more difficult to recruit and retain on active duty than others. Nurse anesthetists (CRNAs) currently represent a specialty for which the military has high demand in peace and war time. Authorizations have been increased, but the supply is not keeping pace with the demand. High civilian salaries contribute to high attrition from the military as well as the inability to adequately recruit in the civilian sector; this competition is best addressed with special incentives.

As demand for nurses in the civilian environment increases, nurse wages have increased rapidly and are expected to continue to increase. The national average for starting nurse salaries surpassed the average military starting pay in 1988 for the first time and the average pay increase of civilian staff nurses was about 5 percent higher than the 1988 military pay raise. Although the military nurse, on average, still receives higher pay than a civilian counterpart, the traditional military competitive advantage has been reduced overall. There is also significant variation in civilian nurse pay among geographic areas. In many areas (especially the Northeast) the average civilian registered nurse (RN) pay is much higher than military pay. The ability to compete in one geographical area does not readily compensate for the inability to compete in another. Prospective civilian employers are also using financial incentives to attract members of the declining nursing student population. Student assistance programs are increasingly common as recruiting tools, particularly in this era of increased costs of graduate education and significantly rising student debt loads.

The use of monetary incentives as management tools will help ensure adequate accessions and retention. **The study recommends two compensation incentives:**

- **A Fiscal Year 1990 Nurse Accession Bonus Demonstration Program**
- **An Incentive Special Pay Plan for Certified Registered Nurse Anesthetists**

The Secretary of Defense will continue to review the status of nursing specialties critical to operation of the MHSS which do not yet require pay incentives.

The report will be followed by an additional supplement reviewing issues in recruiting, retention, and management of other health care providers.

CHAPTER ONE

INTRODUCTION

This report responds to section 612(g) of the National Defense Authorization Act, Fiscal Year for 1989 (P.L. 100-456) which stipulates the following reporting requirements:

The Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives a report containing the following:

(i) An analysis of the current and projected requirements of the Armed Forces for health professionals by specialty and years of service.

(ii) The Secretary's assessment of the adequacy of the existing compensation system for such health care professionals.

(iii) Such recommendations for legislation as the Secretary considers necessary to attract and retain on active duty the health care professionals needed to meet the needs of the Armed Forces.

The Department of Defense confirms that military nurses are essential to the mission of the Military Health Service System (MHSS). Their presence in sufficient numbers, specialties, and experience is crucial in providing beneficiaries access to, and quality care in, the MHSS. While supporting the mission of the MHSS by practicing their profession, military nurses concurrently support the total force by exercising the military duties and responsibilities which are inherent to the function of military officers.

Chapters 2, 3 and 4 of this report define nursing and nurses today and present an overview of the national conditions of registered nurse supply and demand, and legislative history of pays for nurses.

Chapters 5, 6, 7 and 8 of the report provide information specific to military nurses: requirements, force management, recruitment, retention, and an analysis of compensation relevant to recruiting and retaining military nurses.

Recommendations to the Congress concerning legislative actions necessary to attract and retain on active duty military nurses to meet the needs of the Military Departments are addressed within the pertinent chapters.

CHAPTER TWO

NURSES AND NURSING

The nursing profession is responsible to the society which it serves for the delivery of safe and competent nursing care. The authority for nursing practice is vested with each state in the United States. Each state has a nurse practice act that legally controls nursing practice through licensing; legally defines and describes the scope of nursing practice; and distinguishes between independent nursing functions, that is, those activities nurses initiate as a result of their own knowledge and skill, and dependent nursing functions, those activities that are carried out on "orders" of the physician. These laws protect the public by stipulating licensure requirements, grounds for revocation of license, reciprocity provisions, penalties for practicing without a license, and composition of the licensing board. A license is a legal permit granted by the state to certify that the nurse has the minimal degree of competence necessary to protect the public's health, safety, and welfare.[1] It authorizes the individual to practice nursing and to use the title of registered nurse. Registered nurses have completed a course of study in a school of nursing approved by the state board and have passed the national qualifying examination with an acceptable score. Certification, a voluntary process, involves recognition by the profession that the individual has met predetermined standards of nursing competence within a specialty area, such as critical care, oncology, and pediatrics.

Relationships With Other Disciplines

The delivery of health care today requires a multitude of personnel. The primary members of the health care team are nurses, physicians, paraprofessional nursing personnel, and allied health personnel. The centrality of the nurse's function within the health care system, and the constancy of the nurse's presence, serve as a link between the various health care providers. Nurses distinctively assure continuity of care and the delivery of quality patient care.

Nurses and physicians have a collaborative relationship in that they share responsibility for meeting the complex health care needs of the public. They work in partnership combining their medical and nursing efforts to achieve optimal patient outcomes.[2] Their relationship is also interdependent. Nurses are responsible for administering and monitoring activities that are prescribed by the physician based on the medical diagnosis and planned therapeutic regimen and for the nursing process and procedures. Physicians have the responsibility for decisions related to medical diagnosis,

treatment and the overall health care plan, and rely heavily upon the nurse for scientific knowledge and technical expertise, independent clinical judgement, and sound decision-making. One clear example is the care of a patient in a critical care unit. The physician is not there 24 hours a day, but relies on the nurse to have the knowledge and skill to make meaningful interpretations of observed signs and symptoms and to appropriately apply a total health plan of care.

Essential to the delivery of comprehensive nursing care are the paraprofessional nursing personnel who include licensed practical nurses, nursing assistants, and other personnel. Under the direct supervision of the nurse, they provide selected aspects of nursing care to patients. The nurse is responsible for directing, delegating, supervising, and evaluating that nursing care. Although certain procedures and tasks may be delegated to paraprofessional nursing personnel, the nurse cannot delegate the professional responsibility for planning, supervising, and evaluating the nursing care given by the paraprofessional staff.[3] Delegation is a high-level skill requiring not only an in-depth knowledge of the patient's needs and nursing care requirements, but also an accurate assessment of the paraprofessional staff member's knowledge, experience, and skills to perform particular tasks. Further, the nurse is responsible for teaching the staff necessary aspects of nursing care and promoting their career development.

Allied health personnel are those personnel whose activities support, complement, or supplement the professional functions of physicians, dentists, and registered nurses.[4] Concerned with the total well-being of the patient, nurses coordinate the myriad of specialized health care services provided to patients by various personnel. These include, but are not limited to, respiratory therapists, laboratory technologists, radiology technologists, occupational therapists, physical therapists, dieticians, pharmacists, social workers, and clinical psychologists. Such increasingly narrow specialization creates the potential for providing excellent health care services. However, it also creates the possibility of fragmented and depersonalized care. Patients may receive care from 5 to 30 people throughout their hospitalization. "Coordination of care has become profoundly difficult; the synthesis of care, a cognitive and interpersonal feat."[5] Nurses accomplish this and also have a reciprocal collaborative and consultative relationship with allied health personnel which contributes to the delivery of quality patient care.

Major Factors Influencing Nursing Today

Escalating health care costs have resulted in earlier patient discharges and declining admissions. With early discharges there is an increased need for nurses capable of providing highly specialized nursing care to patients in home and ambulatory settings, many of whom are acutely ill and connected to complex life-sustaining devices. With declining admissions, most patients who are hospitalized are seriously ill, increasing the need for nurses trained in intensive specialized acute care.

The impact of technology on the nursing profession is enormous. Therapeutic and diagnostic procedures, transplant surgeries, and life support and monitoring systems have increased in scope and complexity, expanding the nurse's responsibilities and

increasing the need for expertise in the newest technological devices. The application of computers in the health field to maintain patient records, record and analyze physiological parameters, regulate medications, and analyze laboratory data has revolutionized nursing practice and dramatically increased the training needs of nursing personnel.[6]

Changes in societal values influence the delivery of health care. The consumer's expectations for access to health care and specialized health care services have increased. Consumers are more knowledgeable about health and stress-related illnesses and are seeking information and services related to health promotion and disease prevention. The need for nurses to provide health education and counseling is increasing.

The growing elderly population, often with long-term illnesses, requires nurses with specialized training to meet their complex health needs. The increasing number of individuals infected with AIDS presents a particular challenge requiring nurses with experience in epidemiology, acute and chronic care, crisis intervention, rehabilitation, and health education and counseling.

In response to these changes the nursing profession has developed additional educational programs to provide nurses with increased clinical expertise within a specialty area. Nurse practitioners, clinical nurse specialists, nurse-midwives, and nurse anesthetists receive formal programs of advanced education to prepare them for their specialized clinical focus within the health care system.

Specialization in nursing practice reflects the proliferation of scientific knowledge and technology and the need within the health care system for advanced nursing knowledge and skill. A few of the nursing specialties are: geriatrics; infection control; cancer; cardiovascular; high-risk pregnancy and newborn; trauma; operating room; ambulatory care; drug and alcohol addiction; organ transplant; quality assurance; computer technology; biomedical ethics; and resource management.

Military Nursing

The mission of the military nurse corps is to provide nursing care during wartime, in addition to providing nursing care during peacetime to active duty military personnel, their families, and eligible beneficiaries. This mission requires that all active duty military nurses have flexibility and versatility to function within a dynamic health care delivery system.[7]

In peacetime, the military nursing practice environment bears some resemblance to that of the civilian community. However, unique to military nursing is the need to provide care to a mobile military population with world-wide duty assignments. Nurses practice in such varied settings as hospital ships, deployable medical hospitals, and air transportable hospitals located in remote and isolated areas of the world.

The highest priority of the military nurse corps is combat medical readiness, training to prepare nurses to provide nursing care to military forces during wartime. This readiness mission requires expert professional nursing skills for the management of wartime casualties, as well as military knowledge and leadership skills to execute the medical mobilization. The readiness mission for the military nurse corps is operationalized on a daily basis. The most visible aspect of this effort is in promoting the delivery of quality nursing care to active duty personnel, their families, and other eligible beneficiaries.

As a clinician, the military nurse must possess the clinical versatility to function within a variety of practice settings and clinical specialties and to practice more independently in certain circumstances. Nursing assignments may alternate between critical care in a modern teaching hospital, routine health care in an outpatient clinic, and combat casualty care in an austere, dangerous environment with meager resources.

According to the report of the Department of Health and Human Services, Secretary's Commission on Nursing, the following qualities are needed:

- "As a manager, the military nurse must have the organizational skills and flexibility to respond to the demands of military health care and be responsible for all aspects of nursing care in peacetime and in time of mobilization."[8]

- "As an educator, the military nurse must possess the competencies to provide instruction and supervision for junior nurse corps officers who are new to the profession and to the military service, and for paraprofessional personnel who may have had no previous experience caring for the ill".[9] The constant turnover of enlisted nursing personnel intensifies the demand for nurses to provide effective clinical instruction and supervision.

As a commissioned officer, the military nurse "must be capable of providing leadership, management, and planning expertise as well as directing and coordinating the work of others."[10] Leadership development is reinforced at all career levels. Junior nurse corps officers are placed in a "command position," charged with the responsibility of leading and directing the activities of the clinical unit, its patients, and the professional and paraprofessional nursing staff and accomplishing required coordination with other units and activities.

Military personnel are compensated for their service to the country on a 24-hour 365-day basis. Military nurses, "on call" 24 hours a day, are frequently required to work "overtime" without additional pay, a notable distinction from their civilian counterparts. There is no provision for military members to receive monetary compensation for working more than the standard civilian 40-hour week. "Although the issue of undocumented, uncompensated overtime pertains to all military officers, it is significant in the case of nursing because it may obscure a hidden shortage of nurses."[11] In a sample of 2,881 Air Force nurses surveyed in 1987, 46 percent of the nurses averaged

more than a 50-hour work week.[12] Of 998 Navy nurses surveyed in 1987, the average work week was 55 hours.[13] Military nurses are often expected to work longer hours and more frequent shifts in order to meet staffing shortages. When such a working environment becomes objectionable and persistent, it affects retention of military nurses.

Physical readiness is a critical requirement for military nurses today and one which significantly influences promotion opportunities. Compliance with specified weight standards and physical fitness criteria is evaluated regularly. Noncompliance results in poor efficiency ratings and may even result in separation from the service. While fitness is perceived as a benefit of military service, it is also often a personal hardship.

Military nurses must also be ready to relocate their family and household to any world-wide duty assignment, often on short notice. Geographical relocations may cause temporary or long-term separations from immediate family members in addition to the "out-of-pocket" relocation expenses, and some of their tours are arduous.

Summary

Advances in knowledge and technology, intensity of patient care demands, and changing societal factors make nursing a challenging profession. Positive relationships with other disciplines are integral to successful implementation of medical, nursing and other elements in the provision of health care. Military nurses are particularly talented in caring for patients in the multifaceted military health care service system. Military nurses also serve as commissioned officers and perform the duties inherent to that function as well. Their concept of service to country is strengthened by an essential ethos of service to mankind, thus reinforcing the character and performance of the military nurse.

Endnotes

1. Lucie Young Kelly, Dimensions of Professional Nursing, 4th Ed., (New York: Macmillan Publishing Co, Inc., 1981).

2. Howard S. Rowland & Beatrice L. Rowland, Nursing Administration Handbook, (Germantown: Aspen Systems Corporation, 1980).

3. Thora Kron, The Management of Patient Care. Putting Leadership Skills to Work, 4th Ed., Philadelphia: W.B. Saunders Co., 1976).

4. Maryland Pennell & David Hoover, Health Manpower Source Book 21: Allied Health Manpower Supply and Requirements 1950-1980, (Bethesda: U.S. Department of Health, Education and Welfare, 1970), p. 3.

5. Carol A. Lindeman, "Theory and Research as Basic to Nursing Practice", Issues in Professional Nursing Practice, (Kansas City: American Nurses' Association, 1984), p. 15.

6. Barbara Kozier & Glenora Erb, Concepts and Issues in Nursing Practice, (Menlo Park: Addison-Wesley Publishing Co., 1988).

7. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Support Studies & Background Information, Vol II, (Washington, DC: December 1988), p. VI-A-5.

8. Ibid p. VI-A-6.

9. Ibid p. VI-A-6.

10. Ibid p. VI-A-6.

11. Ibid p. VI-A-11.

12. Vital Signs: A Survey of the USAF Nurse Corps, (Randolph Air Force Base: HQ AFMPC/DPMYOS, 1988).

13. Medical Community Navy Occupational Task Analysis Program (NOTAP), (Washington, DC: Navy Occupational Development & Analysis Center (NODAC), 1988).

CHAPTER THREE

CIVILIAN ENVIRONMENT

In December 1987, in response to continuing reports of a nursing shortage, the Secretary of Health and Human Services established a Commission on Nursing to advise on successes and problems related to the recruitment and retention of registered nurses (RNs), on ways in which the private and public sectors might work together to increase the supply of registered nurses both immediately and in the long-term, and to develop a long-term plan to relieve problems in recruitment and retention which involves cooperation of both the public and private sectors. The Commission was also charged to study recruitment and retention of nurses in the Public Health Service, Veterans Administration, and Department of Defense.[1] The Commission's report represents the most recent and extensive analysis of the current status of professional nursing in the United States.

The Commission's report, published in December 1988, states that the "shortage of RNs is real, widespread, and of significant magnitude. There is evidence to support the conclusion that the current shortage cuts across all health care delivery settings and all nursing practice areas".[2] The shortage is particularly significant as it may negatively affect the quality of patient care and accessibility of health services. Because the shortage also has a negative impact on the working environment of currently employed nurses, it may be self-perpetuating by driving currently employed nurses out of the work force.

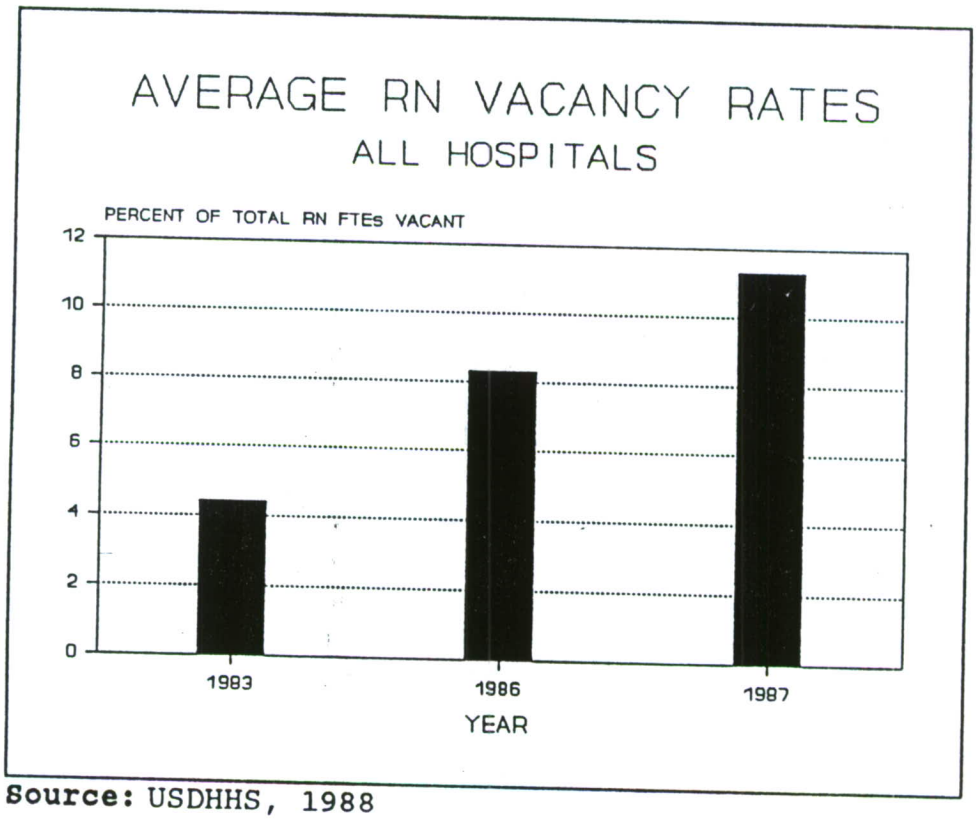
Shortage Indicators

The Commission considered a combination of several measures as indicative of a nursing shortage. The following factors are included among those measures:

- Vacancy rates
- Recruitment time
- Hospital bed closures
- Use of temporary agency nurses

Vacancy Rates

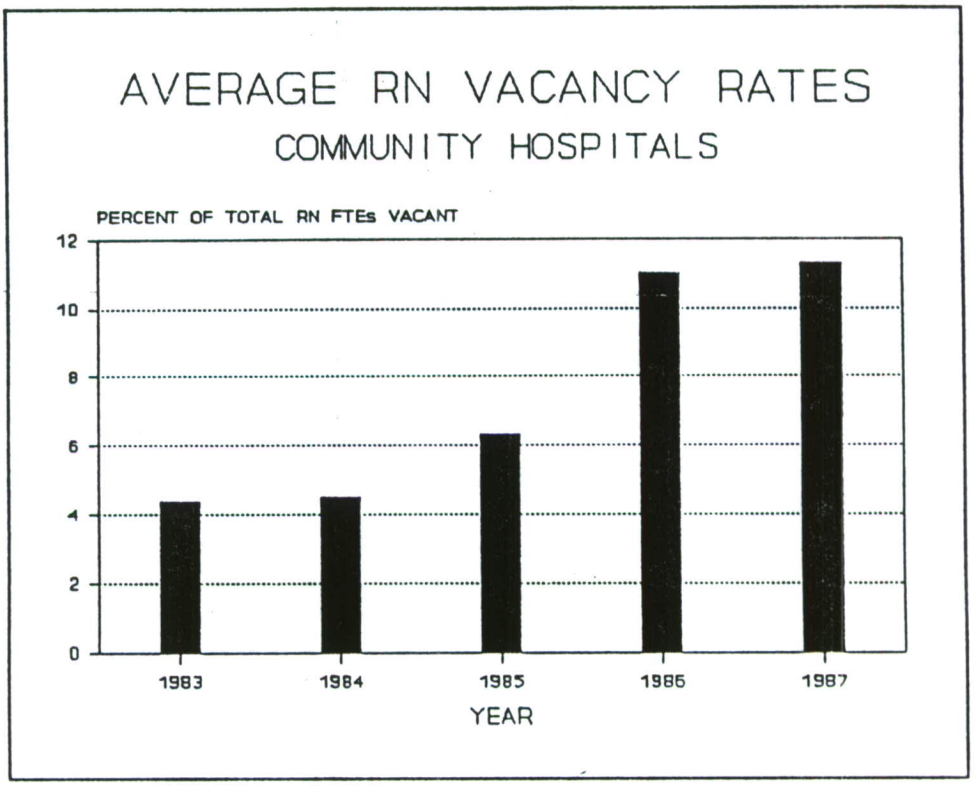
One of the most significant indicators is high vacancy rates for full time equivalent (FTE) positions for RNs. The American Hospital Association (AHA) reported that the average hospital vacancy rate for RNs has risen significantly since 1983 with a marked increase occurring between December 1985 and December 1987.[3] Figure 3-1 shows the growth in vacancy rates for approved RN full time equivalent positions.



Source: USDHHS, 1988

Figure 3-1: Average RN Vacancy Rates, All Hospitals

As shown in Figure 3-2, the shortage has also had an impact on community hospitals, with a significant increase in RN vacancies between 1985 and 1987.[4]



Source: USDHHS, 1988

Figure 3-2: Average RN Vacancy Rates, Community Hospitals

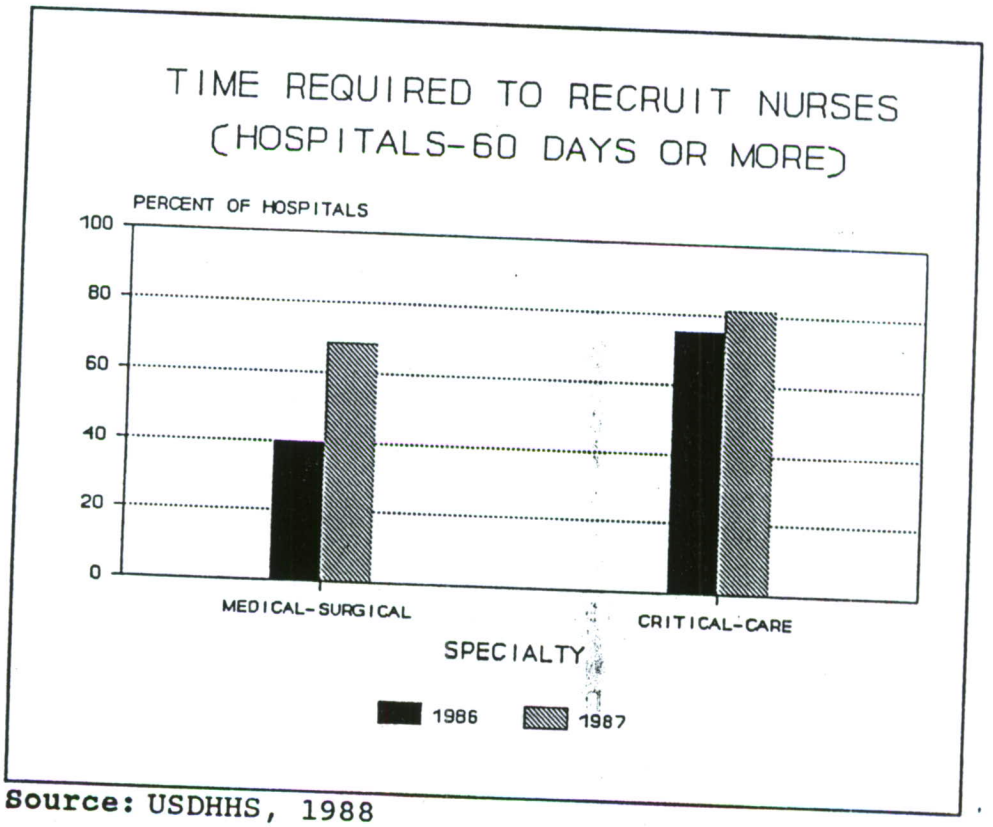
Other health care sectors which employ nurses appear to be similarly affected. The American Health Care Association, a nursing home trade association, conducted a study in 1987 which estimated the national nursing vacancy rate at nursing homes to be approximately 23 percent. Between 3 and 30 percent of nursing homes are estimated to fall below federal standards for minimum nurse staffing.[5]

In 1988, the National Association of Home Care, an industry trade association, conducted a survey which showed that 56 percent of home health agencies were experiencing some difficulty in recruiting and retaining adequate numbers of nurses. Forty percent of the agencies indicated that they were currently understaffed.[6]

Finally, the ambulatory care environment also appears to be experiencing a shortage of RNs. The Secretary's Commission on Nursing found no objective data for the ambulatory care sector, but did receive testimony from nursing representatives of health maintenance organizations that indicated a current nurse shortage in this care sector. Testimony also indicated that the shortage had increased between 1986 and 1988.[7]

Recruitment Time

AHA data show that hospitals are requiring lengthy periods to hire RNs. Figure 3-3 shows the percent of hospitals requiring 60 days or more to recruit for different specialties, a period of time categorized by the AHA as representative of difficult recruiting conditions. In 1987, 90 days or more were required by 46 percent of hospitals to fill critical care positions.[8]



Source: USDHHS, 1988

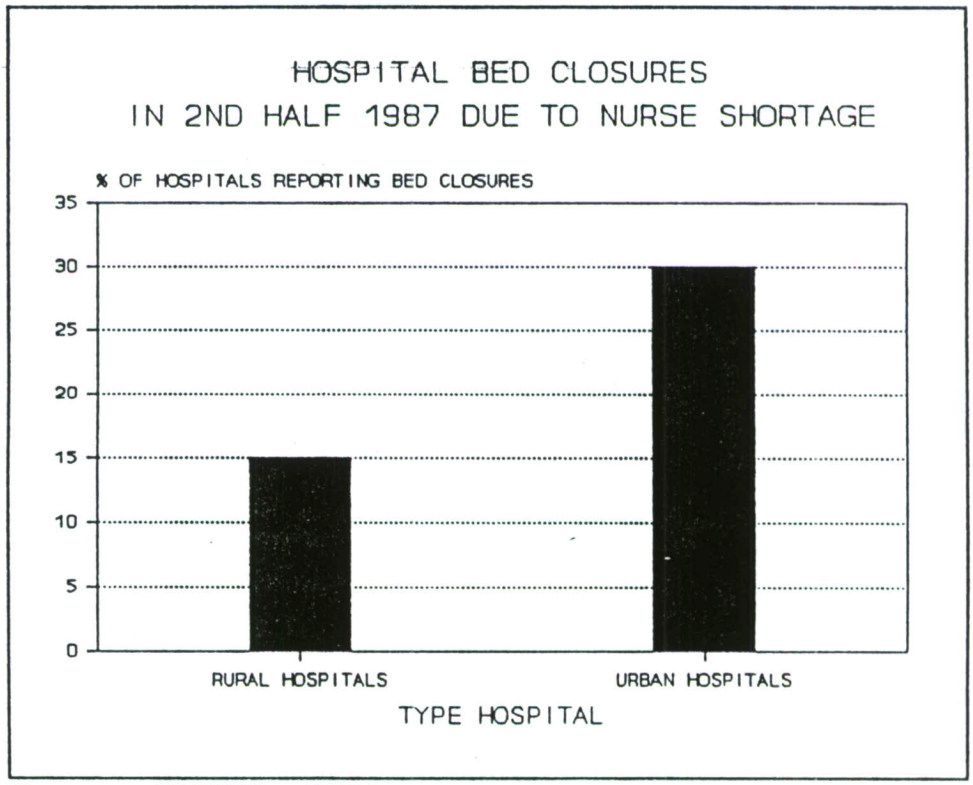
Figure 3-3: Percent of Hospitals Requiring 60 Days or More to Recruit Nurses

Recruiting and retention have reportedly become more difficult for the nursing home, home health care, and ambulatory care sectors of nursing as well. In a 1987 survey conducted by the American Health Care Association, 51 percent of responding facilities indicated requiring more than 90 days to fill staff RN positions.[9]

The home health care sector shows similar difficulty in recruiting RNs. The National Association of Home Care survey, conducted in 1988, indicated that 56 percent of responding home health agencies indicated having some difficulty in recruiting and retaining RNs.[10]

Hospital Bed Closures

The 1987 AHA survey also showed a direct correlation between the RN shortage and bed closures that administrators believe are attributable to nurse understaffing. Figure 3-4 shows, by hospital type, the percent of hospitals that indicated closing beds in the latter half of 1987 that was directly attributable to a shortage of RNs.[11]

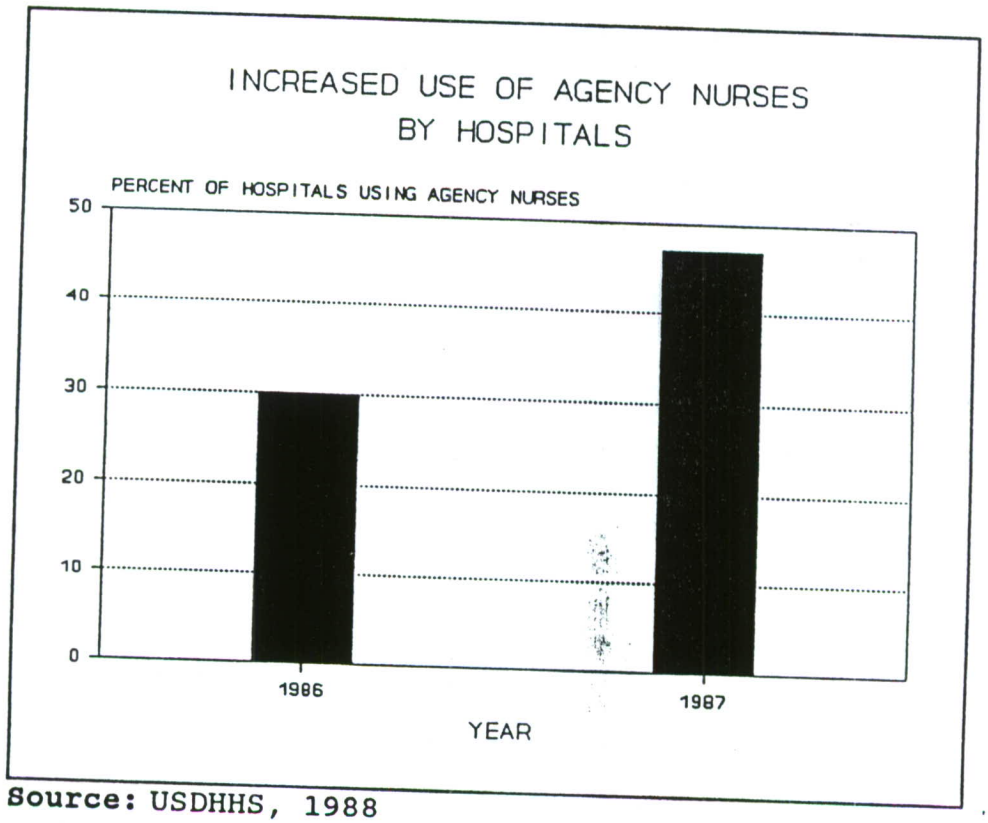


Source: USDHHS, 1988

Figure 3-4: Percent of Hospitals Reporting Bed Closures in 2nd Half 1987 Due to Nurse Understaffing

Use of Temporary Agency Nurses

Figure 3-5 indicates the use of temporary agency nurses increased from 30 percent of civilian hospitals in 1986 to 47 percent in 1987.[12]

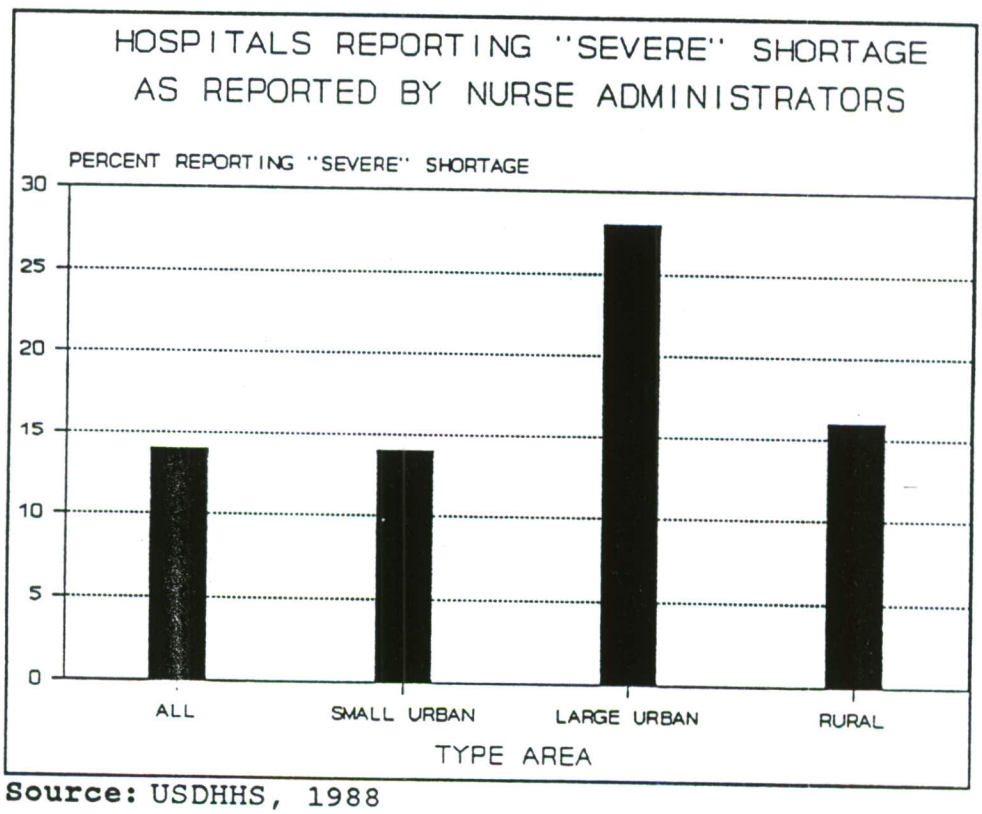


Source: USDHHS, 1988

Figure 3-5: Percent of Hospitals Using Agency Nurses, 1986-1987

Opinions of Nurse Administrators

The 1987 AHA survey also elicited subjective opinions from respondents about the relative severity of any local shortage. Hospital nurse administrators in 76 percent of the hospitals surveyed assessed their hospitals as experiencing an "overall" shortage of RNs. Figure 3-6 shows the percentage of hospitals reporting a "severe" shortage.[13]



Source: USDHHS, 1988

Figure 3-6: Percent of Hospitals Reporting "Severe" Shortage as Reported by Nurse Administrators

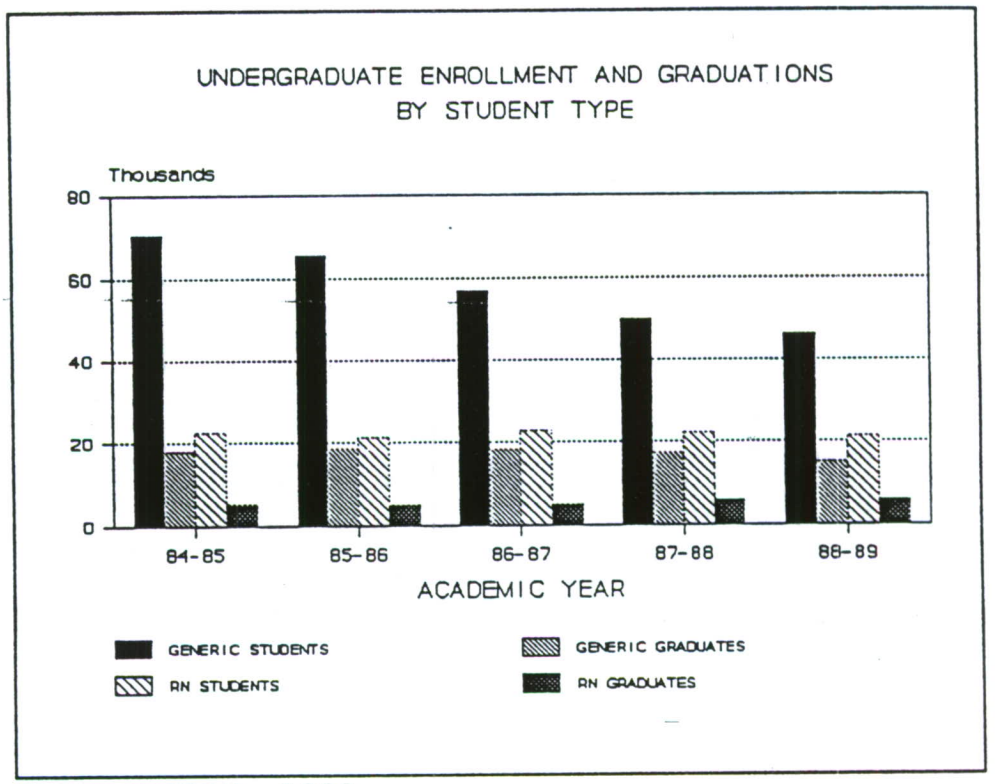
In summary, the Secretary's Commission on Nursing estimated that in 1987, an additional 117,000 full time equivalents would have been required to fill RN vacancies in hospitals and 21,000 additional in nursing homes.[14]

Supply and Demand

Supply

The actual supply of RNs continued to increase through 1988, with the overall supply reaching the highest level in history due largely to the great number of students in basic nursing education programs in the mid-1970s.

Although the total number of licensed nurses is at a historical peak, the pool of new nurse graduates is declining. There is a well-documented decline in nursing school enrollment and graduations in very recent years. Figure 3-7 shows the decline in enrollment and graduations since 1984 for generic students (students with no prior nursing education). RN students (students who are already licensed as registered nurses) show a decline in enrollment with a slight increase in graduations. This is a small and generally older student population, however, that is less likely to enter military service. Total undergraduate enrollment has declined 31.9 percent since 1984 and graduations by 14.5 percent among member schools of the American Association of Colleges of Nursing.[15] There has also been a decline in male enrollment, with the greatest decrease in Bachelors of Science-Nursing (BSN) programs. Minority enrollment in basic nursing programs has also decreased.[16]



Source: AACN, 1988

Figure 3-7: Undergraduate Enrollment and Graduations, by Student Type

The decline in enrollments and graduations is projected to continue. Figure 3-8, as displayed in the Secretary's Commission on Nursing, Final Report, shows a marked decrease in interest in nursing as a career among female first-time, full-time entering freshmen.[17]

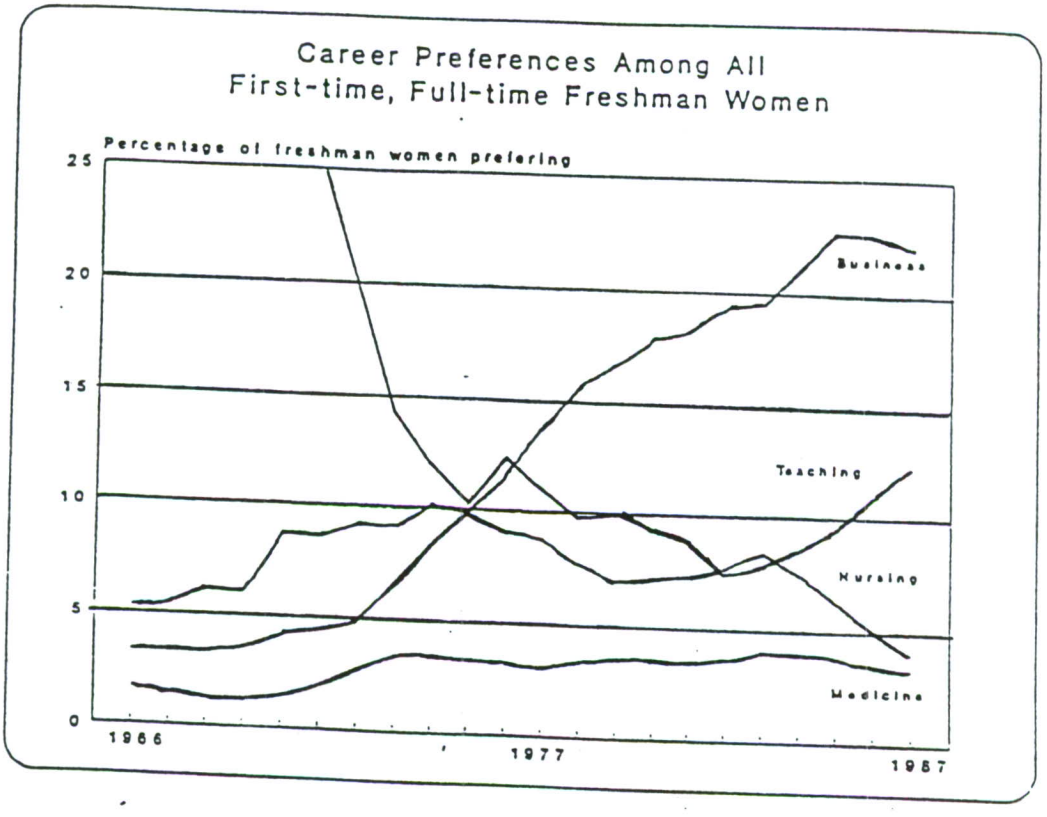


Figure 3-8: Percentage of Freshmen Women Preferring Various Careers

Declining student enrollment is projected to exacerbate the shortage, seriously compromising availability and quality of nursing services. The differential between supply and demand is projected to worsen if intervention does not occur. Because a high percentage of licensed nurses is already employed, a stable or increased supply must come from new nurses entering the field. Major factors viewed as contributing to decreased enrollment and graduation of nurses include the following:

- o Increased career opportunities for women
- o Poor wage comparability
- o Professional factors
- o Changing national demographics
- o Fear of AIDS
- o Decreased education subsidies

Increased Career Opportunities/Low Wages

As more high-paying and professionally challenging career fields open to women, fewer women are entering the field of nursing. Figure 3-9, from the Secretary's Commission on Nursing, Final Report, shows the low income of nurses relative to incomes of different service occupations in 1987.[18]

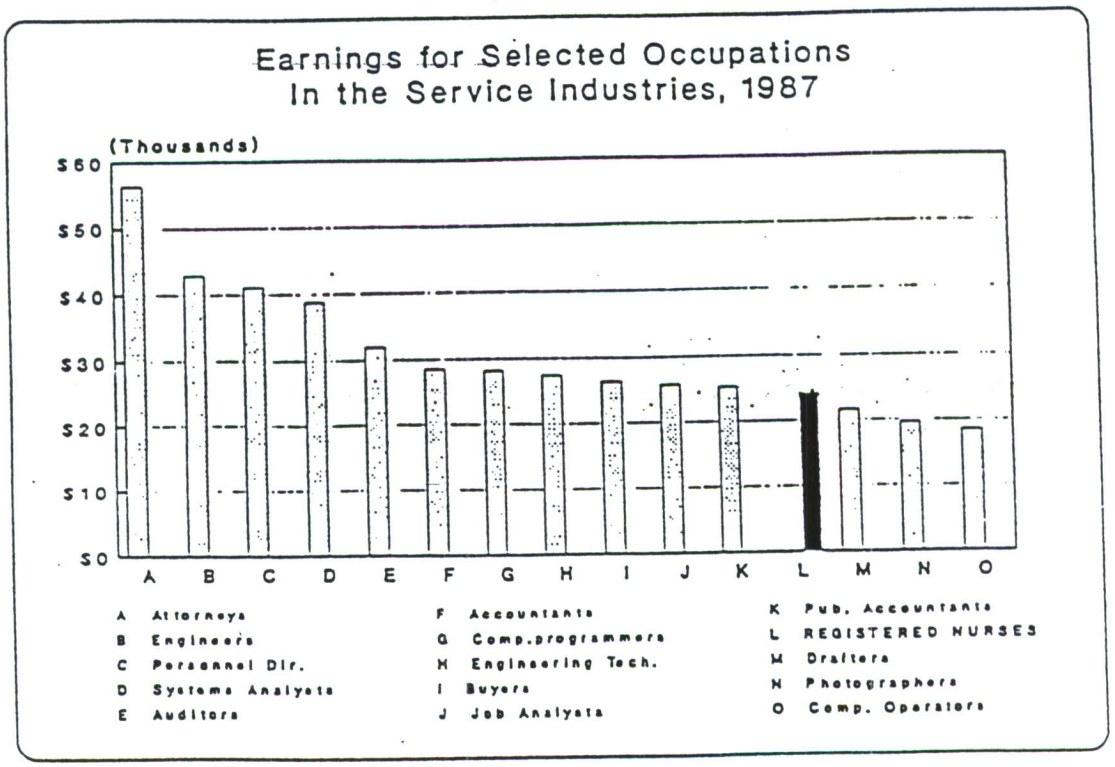


Figure 3-9: Earnings of Selected Occupations in the Service Industries, 1987

Following a nurse shortage in the late 1970s, nursing wages rose to approximate equivalency with teachers' in 1980. By 1985, however, nurses' incomes had fallen approximately 20 percent below teachers' salaries and were approximately 10 percent less than average salaries for all female professionals and technical workers.[19]

Professional Factors and Working Conditions

There are many professional values involved in job satisfaction which may be better met in other professions. Among such factors are professional autonomy and mutually respectful relationships with other professional personnel in the working environment. Nurses frequently are not able to practice at the levels of professional autonomy for which they are educated and may be inappropriately regarded relative to their level of education and skill.

Working conditions may also be stressful and dissatisfying for many nurses. Common stressors are changing schedules and rotating shifts.

National Demographics

Declining birth rates between 1965 and 1976 have resulted in a small population of 18 year olds, the population from which basic nursing programs historically draw the greatest percentage of admissions. The decline in this group is projected to continue until 1994.[20]

AIDS Epidemic

The presence of AIDS in the population may deter some potential students from entering the profession. A recent study showed that even among qualified nurses, 25 percent of those surveyed believed themselves to be at moderate or high risk for contracting AIDS even though the objective risk was very small.[21]

Decreased Education Subsidies

Declines in availability of education subsidies may also be a cause of fewer individuals entering the profession. Federal support for basic nursing education programs reached a high of $102.5 million in 1976, but was terminated in 1983. Further, there has been a decline in availability of student scholarships, with loans becoming more prevalent. Loans have also become harder to get and more costly, paralleling the marked increases in costs of education. Students frequently leave college with large debt loads.

The Secretary's Commission on Nursing reports that observers of the current RN shortage believe this shortage may be different from previous cyclical nursing shortages and not likely to be swiftly resolved.

Demand

The Secretary's Commission determined that "the current shortage of RNs is primarily the result of an increase in demand as opposed to a contraction of supply."[22] The increased demand for nursing services currently outstrips even today's large supply. The demand for registered nurses is expected to continue to increase and exceed the supply.

Table 3-1 shows major factors which have contributed to the increased demand for RNs. Several factors appear contradictory, such as an increased demand for hospital nursing services occurring simultaneously with decreased hospital patient admissions and decreased length of hospital stay. Both factors, however, result in only the sickest patients generally being cared for in hospitals. There is also a shorter period of time in which to provide the full array of nursing services which previously could be delivered to patients and families over a longer hospitalization. Even advances in medical technology, which might be projected to reduce demand for nurses, appear to have created an increased demand for highly skilled nurse labor.

Table 3.1
Major Factors Contributing to Increased Demand for Registered Nurses

Factor	Resulting in	Impact
Hospital budget constraints	o Substitution of RNs for other patient care personnel o Decreased patient admissions o Decreased length of patient stay o Increased patient acuity	o Increased demand for RNs o Compression of nursing services o Increased demand for nursing services in nursing homes and the home environment o Requirements for more complex and intense nursing care
Aging population	o Larger population with increased health care needs	o Increased demand for health care o Increased demand for more complex health care
	o Larger population in nursing homes	o Increased demand for nursing services in nursing homes
Advances in medical technology	o Saving and prolonging lives of previously terminal patients o Increased complexity of care o Complications of highly technical treatments	o Increased demand for specialized knowledge and skilled nurse labor
AIDS	o Increased number of patients with frequent hospitalizations o Increased requirement for intensive nursing care	o Increased demand for nursing services

Source: Secretary's Commission on Nursing, Interim Report, Vol. III, December 1988.

Summary

The Secretary's Commission on Nursing has concluded that the current nursing shortage may be fundamentally different from previous shortages. The current shortage is primarily attributable to increased demand for nursing services. The increased demand is not matched by new input into the nursing profession, which is projected to further increase the differential between supply and demand. Some factors may be changed to increase interest and enrollment in the nursing profession, but other factors, such as the demography of a small college-age population, cannot be readily overcome. Due to the very high level of employment among already licensed nurses, the current shortage may not be as readily influenced by market factors, such as increases in wage and benefits, as were previous shortages. The combination of increased demand, an existing high level of employment, and declining input into the profession has created increased competition for nurses.

As a result of the shortage, many employers of nurses have engaged in salary and benefit competition. In 1988, average pay for staff nurses and nurse managers increased by 7 and 9 percent respectively, with some nurse wages increasing by as much as 13.4 percent.[23] Salaries are projected to continue to increase at approximately the same rate. Enhanced benefit packages are also being offered as well as special bonuses and strong educational assistance programs. Many of the benefits which the military has provided are now being matched or exceeded by civilian employers.

The nursing shortage is significant for the Department of Defense. The Services currently access the majority of nurses immediately following completion of basic nursing education in a civilian nursing program. A decline in output from civilian nursing programs will directly reduce the size of the pool from which the DoD recruits. Simultaneously, competition for both the new graduate and the experienced nurse is greatly heightened in the civilian market. The DoD must remain competitive in the civilian marketplace for both the entry level nurse and for nurses with experience and advanced training. The Services cannot sustain excessive losses of experienced military nurses in an environment where replacement through new accessions will become increasingly difficult.

Endnotes

1. "CHARTER of the Secretary's Commission on Nursing," U.S. Department of Health and Human Services, Washington, DC, December 1987.

2. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Interim Report, Vol. III, (Washington, DC:July 1988), p. iii.

3. Ibid. p. III-4.

4. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Final Report, Vol. I, (Washington DC:December 1988), p. 5.

5. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Interim Report, Vol. III, (Washington, DC: July 1988), p. III-6.

6. Ibid. p. III-6.

7. Ibid. p. III-7.

8. Ibid. p. III-4.

9. Ibid. p. III-6.

10. Ibid. p. III-6.

11. Ibid. p. III-3.

12. Ibid. p. III-5.

13. Ibid. p. III-5.

14. Ibid. p. III-7.

15. Barbara K. Redman, Kathleen M. Neill, and Sarah Haux, Report on Enrollment and Graduations in Baccalaureate and Graduate Programs 1984-1989, (Washington, DC: American Association of Colleges of Nursing 1989), pp. 14-15.

16. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Interim Report, Vol. III, (Washington, DC:July 1988), p. IV-14.

17. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Final Report, Vol. I, (Washington, DC: December 1988), p. 16.

18. Ibid. p. 12.

19. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Interim Report, Vol.III, (Washington, DC:December 1988), p. IV-16.

20. Ibid. p. IV-15.

21. Ibid p. IV-21.

22. Ibid. p. IV-1.

23. Ben S. Cole, "Nurse Compensation", Modern Health Care, December 2, 1988, p. 24.

CHAPTER FOUR

LEGISLATIVE HISTORY

Legislative and Regulatory History of Incentives for Nurses in the Department of Defense

Several categories of legislation and military regulations have directly or indirectly affected the pay of nurses in the military. The primary categories involve the following major areas:

- o Establishment of the nurse corps and achievement of rank parity
- o Special pay for nurses on active duty
- o Incentives and management initiatives for reserve nurses
- o Constructive service credit
- o Education programs

Rank Parity

Table 4-1 shows highlights in the establishment of the stages in achieving formal military integration of the Army and Navy Nurse Corps and in achieving rank parity for nurses. The history of the Air Force Nurse Corps is different from that of the older two nurse corps. By the time the Air Force Nurse Corps was established in 1949, many strides had been made by the other two Services from which Air Force nurses immediately benefited. The achievement of rank parity was significant for military nurses since previously they had neither the same commissioned status nor pay and retirement benefits as other officers. These legislative changes came as a result of a need at different times in history to enhance the status, pay, and benefits of the military nurse in response to problems with recruitment, retention, and morale.

Table 4-1
Establishment of the Nurse Corps and Rank Parity for Nurses

Date	Service	Effect
1898	Army	Nurse Corps Division established
1901	Army	Nurse Corps permanent
1908	Navy	Nurse Corps established
1920	Army	Relative rank, O-1 to O-4
1938	Navy	Nurse Corps permanent
1942	Army	Relative rank to O-6, pay and allowances approximated male counterparts
	Navy	Relative rank, O-1 to O-4
1944	Army/Navy	Actual rank and temporary commissions, O-1 to O-6
1947	Army/Navy	Permanent commissions, O-1 to O-6
1949	Air Force	Nurse Corps established
1967	All	Promotion equivalent to men

Special Pay for Nurses in the Active Components

Although legislation intended to authorize different special pays and bonuses for certain categories of active component nurses has been introduced by Congressional members, no special or incentive pays for active duty military nurses have yet been authorized.

Legislation proposed since 1980 includes the following items:

o S. 160, January, 1987 - This bill would have entitled nurses, qualified in specialties determined by the Service Secretary concerned to be staffed at critically low levels, to receive monthly special pay while assigned to a remote location. Specialties specifically listed in the bill included critical care, surgery, obstetrics, and anesthesia.

o S. 2069, February, 1988 - This bill would have authorized the payment of an annual lump sum bonus to qualified nurses in return for an agreement to remain on active duty for a period of not less than one year. The amount of the bonus would have been determined by the Service Secretary concerned.

o The Department of Defense Appropriations Bill, 1989 - This bill included special pay for military nurse anesthetists. The legislation that would have authorized payment (S. 2069) was not enacted.

o P.L. 100-690, November, 1988 - This law amended the Public Health Service Act to formally link the pay of commissioned nurses in the Public Health Service with any future special pay authorized for commissioned nurses in the DoD.

Independent of the Department, two bills dealing with incentives for nurses have been introduced in the Senate for Fiscal Year (FY) 1990 and 1991.

o S. 130, January, 1989 - This bill is a reintroduction of S. 2069 from 1988. It would authorize payment of a bonus for nurses in return for a commitment to remain on active duty for at least an additional year. The intent was that it be applied immediately to a bonus for nurse anesthetists, but at the same time provide flexibility to the Services in identifying other critical specialty shortage areas.

o S. 131, January, 1989 - This bill would exclude nurses from computation of the control grade ceilings as prescribed by the Defense Officer Personnel Management Act (DOPMA). Nurses would be added to medical and dental officers who are currently excluded from computation of the grade ceilings.

Incentives for Reserve Nurses

In 1985, due to an acute shortage of physicians and nurses in the reserves, the Congress legislated two reserve incentive programs for reserve health care professionals qualified in or undergoing training in specialties designated as critically short for wartime. Programs applied equally to medical and nurse corps officers.

Table 4-2 summarizes the incentives and management initiatives authorized for reserve nurses since 1985. These programs emphasize the fact that the nurse shortage spans the Total Force and that the Congress has already acted to address the problem legislatively for the reserve components.

Table 4-2
Incentives and Management Initiatives for Reserve Nurses

Program/Initiative	Eligible Nurses	Benefit	Obligation
Stipend for Reserve Health Professionals (FY87 DoD Authorization Act)	o Fully qualified o In training in specialties critically short for wartime o In Selected Reserve	Monthly stipend*	3 yrs Selected Reserve
Stipend for Reserve Health Professionals (Modified and expanded by FY88/89 DoD Authorization Act)	o Fully qualified o In training in specialties critically short for wartime	o Monthly stipend* (Selected Reserve)	2 yrs Selected Reserve
	o In Ready Reserve	o One-half monthly stipend* (Individual Ready Reserve (IRR))	2 yrs IRR
	o 3rd and 4th yr baccalaureate nursing students	$100 per month	1 yr IRR
Education Loan Repayment Program (FY87 and FY88/89 DoD Authorization Acts)**	o Fully qualified in specialties critically short for wartime o In Selected Reserve	Annual $3,000 repayment of education loans. Total repayment of $20,000	1 yr in Selected Reserve
Increase in Age for Initial Appointment (FY88/89 DoD Authorization Act)	o Fully qualified in specialties critically short for wartime	Increased recruiting pool by increasing maximum age for appointment to no less than 47 years	
Retention in Active Status (FY88/89 DoD Authorization Act)	o Fully qualified	Provides retirement opportunity for members appointed at 47 yrs by increasing maximum age for retention in active status to 67 yrs	
Pilot Test Program for Specialists in the Selected Reserve (FY89 DoD Authorization Act)	o Fully qualified in specialties critically short for wartime o In Selected Reserve	Test of variable size bonus not to exceed $10,000 annually	Test of variable length obligations

* The stipend is adjusted annually based on the percent increase in basic pay rates. The monthly stipend as of 1 July 1988 was $678.00.

Constructive Service Credit

The award of constructive service credit has direct impact on the income of the recipient officer as the amount of military pay is determined by rank and promotion. Award of constructive service credit is designed to create equity between individuals who enter active duty immediately following completion of a basic nursing program and those who enter military service later, following completion of an advanced professional degree or after years of professional civilian experience. The legislative authority to grant constructive credit for professional experience has varied as shown in Table 4-3. The most recent change came as a result of recognition by the Congress of the need to expand the nurse recruiting pool to include lateral entry of older, more experienced nurses. The authority to grant constructive service credit for professional experience to nurses without an advanced degree was provided to make appointment more attractive to the experienced nurse. While the award of constructive service credit is beneficial, its impact is lessened by the restrictions of the DOPMA grade tables.

Table 4-3
Award of Constructive Service Credit

Period/Legislation	Credit Authorized for Advanced Degree	Professional Experience*
Pre DOPMA	Yes	Yes
Post DOPMA** Sep 15, 1981 - Dec 3, 1987)/ P.L. 96-513	Yes	Only in conjunction with advanced education
Post DOPMA (Dec 4, 1987 - Present)/ P.L. 100-180	Yes	Yes

*Limits on the amount of professional experience which may be granted are prescribed by DoD Directive 1312.2, "Entry Grade Credit for Health Services Officers".

**DOPMA was enacted Dec 12, 1980, but was not implemented until Sep 15, 1981.

Deferral of Mandatory Retirement for Age

The National Defense Authorization Act for Fiscal Year 1988-1989 amended Title 10, U.S.C. to permit the Service Secretary concerned to defer mandatory retirement for age to 67 years for certain health care professionals who during the period of deferral would be providing patient care or performing other clinical duties. Nurses were included under this authority.

Civilian Nurse Employees in Federal Health Care Facilities

In the case of civilian nurses working in Federal medical treatment facilities, the Congress has clearly acknowledged the variance in civilian markets along with the importance of competing successfully with civilian employers in local markets. The Congress has further indicated its awareness of special problems in recruiting and retaining members of many health care disciplines, with nurses often selected for particular emphasis. The Congress has also enabled the Federal government to pay premium pay to civilian nurses and other authorized health care personnel working in Federal treatment facilities for shifts, overtime, and other special types of duty to compete with the prevailing payment mechanisms in the civilian marketplace.

The Office of Personnel Management and the Veterans Administration have statutory pay authorities that permit flexibility in tailoring compensation programs to national or local market conditions where there are problems with recruitment and retention of civilian nurses. These authorities also provide for premium pay for shift work and overtime. Variable provisions exist for on-call and standby duty.

Since 1981, the Veterans Administration has also had additional authority to increase rates of premium pay and to pay full-time pay for two twelve-hour tours on Saturday and Sunday. The authority was granted to allow flexibility in establishing competitive pay for nurses in geographic areas where the Veterans Administration is experiencing recruitment and retention problems. In 1988, the Congress also authorized the Veterans Administration to use a recruitment and retention bonus where necessary to achieve adequate manning of nursing specialties, although the Veterans Administration has not used this authority to date.

The Congress has recently attempted to provide the DoD with more flexibility for establishing pay for civilian health care professionals. The Fiscal Year 1988 Defense Appropriations Bill contained language to allow the DoD to waive Federal regulations concerning wage rates for authorized civilian employees in certain health care skills. The Department concluded, however, that there was insufficient authority provided to comply with Congressional intent as civilian salaries are established in law rather than by regulation.

The Department subsequently submitted a proposal to grant the DoD the authority needed to waive wage rate restrictions for civilian health care personnel in high cost areas. The proposal was deleted from the Fiscal Year 1989 Defense Appropriations Bill, however. Enactment of special pay authority may be necessary for the DoD to remain competitive with civilian medical facilities.

Table 4-4 shows the authority for civilian pay authorized the Office of Personnel Management and the Veterans Administration.

Table 4-4
Pay Authority for Civilian Nurse Employees in Federal Health Care Facilities

	Basic Pay	Premium Pay	Recruitment and Retention Bonus
Office of Personnel Management (Title 5, U.S.C.)	Flexible Rate	Standard Rate	No
Veterans Administration (Title 38, U.S.C.)	Flexible Rate	Flexible Rate	Yes (P.L. 100-322, 1988)

Nursing Education Sponsored by the Armed Forces

The value of military-sponsored education as a recruiting tool has long been recognized as one of the most powerful mechanisms available to the Military Departments to achieve adequate levels of manning. This is particularly true in the health professions due to the significant education requirements for professional qualification in the health care disciplines. The Services all currently sponsor advanced training for commissioned nurses on active duty. Between the late 1950s and the early 1980s, nursing training programs also were used extensively by the Services as a procurement source to assist in achieving an adequate supply of nurses. Participants incurred an active duty obligation. The primary programs used are listed below:

o Diploma Program: Nursing students enrolled in diploma programs received pay and allowances at pay grade E-3 during the last year of training.

o Baccalaureate Program: The military paid the cost of tuition, fees, and books for nursing students in their third or fourth year of training. Participants also received pay and allowances at pay grade E-3 until six months prior to graduation when the student was promoted to pay grade O-1. Toward the end of the program, promotion was delayed until the individual had graduated.

o Walter Reed Army Institute of Nursing Program: This Army-unique program provided the cost of tuition, fees, and books for the full four years in a baccalaureate nursing program. Pay and allowances were also paid at pay grade E-3. Participants enrolled at the institution of their choice for the first two years of nursing education; the final two years of training were taken at the University of Maryland.

o Registered Nurse Program: Individuals who were already registered nurses could be commissioned and receive pay and allowances appropriate to their grade for up to 24 months while enrolled in a baccalaureate or master's degree program.

Summary

Legislative action has occurred historically to relieve problems with recruiting and retention of military nurses. Although no special pays or incentives for active component nurses currently exist in statute, there have been several proposals in recent years. Legislative initiatives have been enacted recently to assist the reserve components in achieving adequate manning of registered nurses. As the active components begin to show signs of suffering from the impact of the national nurse shortage, legislative assistance is required on their behalf.

CHAPTER FIVE

NURSE REQUIREMENTS

The peacetime nurse manpower requirements of the active duty military nurse corps are presented in this chapter to provide a basis for the compensation analysis. Assuming an adequate supply of qualified nurses, and a competitive compensation system, a force structure designed to meet the lowest requirements level is equally capable of expanding over time to a larger force.

The Military Departments have presented two different approaches to calculations of estimated peacetime force levels desirable to reduce the cost of purchased care. Neither is all inclusive. Each service counts health care workload differently and addresses service unique effects of environment, facility size and mission and operational commitments in a distinct manner.

The methodologies used are:

- Peacetime Cost Analysis - an economic model based on Military Expense and Reporting System (MEPRS) data and Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) workload

- Peacetime Nursing Requirements - model based on patient classification and intensity of nursing care, utilizing the proposed Joint Healthcare Manpower Standards (JHMS)

- Additionally there is a statement from the military departments of the nurse corps' budgeted and actual end strengths. These numbers depict the differences between the number of nurses provided for in the budget and the number of nurses on active duty, by aggregate and selected nurse specialties.

Peacetime Cost Analysis

The methodology is based on 1987 level of demand for health care services. This is estimated by the sum of services provided through the direct care system as reported through MEPRS and services provided through CHAMPUS reimbursement. A complete overview and description of this methodology is presented in the "Health Professionals Special Pays Study," December 1, 1988, pages 2-8 through 2-16.

The tradeoff factor is utilized in this methodology. This is the ratio of the increase in the direct care workload to the decrease in CHAMPUS reimbursed care. The tradeoff factor only impacts outpatient services. Most nurses work in inpatient areas, therefore the variance between the simple and complex tradeoff factor totals is small.

Table 5-1[1] summarizes the results of the analysis by branch and clinical area. The table shows the additional nurses required under the alternative assumptions of the tradeoff factor as defined in the OASD Program Analysis and Evaluation study of the DoD direct care system. The analysis is performed by DoD region. The advantage of such an analysis is that it provides a possible economic solution to the question of manpower requirements. The nurse requirements in this analysis do not include nurse anesthetists, nurse practitioners, or psychiatric nurses.

TABLE 5-1[2]

Summary of Analytic Results
Additional Nurse Manpower Required

Clinical Area	Simple Tradeoff Factor	Complex Tradeoff Factor
Army		
Medical	149	161
Surgical	66	69
Neurology	12	13
Orthopedics	10	10
Ophthalmology	1	1
Otolaryngology	5	5
Urology	5	5
Gynecology	12	13
Obstetrics	268	268
Total	528	545

Table 5-1 (Continued)

Clinical Area	Simple Tradeoff Factor	Complex Tradeoff Factor
Navy		
Medical	95	104
Surgical	34	39
Neurology	5	5
Orthopedics	6	6
Ophthalmology	1	1
Otolaryngology	5	6
Urology	4	4
Gynecology	11	12
Obstetrics	256	256
Total	417	433
USAF		
Medical	130	130
Surgical	42	44
Neurology	5	6
Orthopedics	5	5
Ophthalmology	1	1
Otolaryngology	3	3
Urology	3	3
Gynecology	19	20
Obstetrics	337	337
Total	545	549
DoD		
Medical	374	395
Surgical	142	152
Neurology	23	24
Orthopedics	20	21
Ophthalmology	2	3
Otolaryngology	13	14
Urology	12	12
Gynecology	42	45
Obstetrics	861	861
Total	1,490	1,527

The most significant result of this study is that it shows that it is cost effective to the government to recapture CHAMPUS inpatient workload. Profitable employment of nurses can contribute significantly to dollar savings. To recapture the cost effective portion of CHAMPUS workload, the Medical Departments would require approximately 1530 more nurses than the 1987 workload.

Peacetime Nursing Requirements

The estimated peacetime nurse requirements using the Joint Healthcare Manpower Standards (JHMS) are presented in table 5-2.

The Joint Health Manpower Standards, inpatient nurse requirements are based on the Workload Management System for Nursing, approved by U.S. Army Manpower Authorization Requirements Documentation Agency, in 31 December 1986.

Requirements for positions in fixed medical treatment facilities were divided into two categories. The first category comprises nursing requirements accounted for by the JHMS (intensive care, medical/surgical, pediatric, antepartum/postpartum, neonatal intensive care, newborn nursery, and psychiatry). The other category includes those not accounted for by the JHMS (labor and delivery, operating room, central sterile supply, post anesthesia care, occupational and environmental health, nursing administration, infection surveillance, nursing quality assurance, education and staff development, and nurse methods analysts). See table 5-2.

Occupied bed days from the 1987 Medical Expense Performance Reporting System (MEPRS) and Army historical (1985) patient classification spreads were used for each nursing work center to determine requirements. Nurse-midwives and nurse practitioners were not included in this study.

The actual number of nursing units of each type were not known for Army facilities. To account for the additional requirement for a head nurse for each unit, the number of units were estimated based on the size of the facility and the workload reported.

As described earlier in the report, there is a national trend toward increasing quantity and specialization of nursing services required to deliver nursing care. This trend, based on notable increases in the level of patient illness, is becoming increasingly evident in the military peacetime health care system. As a consequence, development of military nursing requirements must account for current and projected levels of complexity of patient care.[3]

Table 5-2

ESTIMATED PEACETIME NURSING REQUIREMENTS

	Army	Navy	USAF
Inpatient nurse requirements (JHMS - Jan 89)	4388	2036	3795[1]
Nurse requirements in fixed facilities (Not included in JHMS)[2]	1800	814	1386
Nurse Anesthetists[3]	278	176	273
Outpatient nurse requirements (JHMS - Jan 89)	893	536	1156
Special assignments outside fixed medical treatment facilities	648	516	489
Total nurse requirements	8007	4078	6812

Source: OASD(HA)/MRA/JMO 28 September 1988

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[1]The JHMS priceout is based on estimated patient classification percentages and occupied bed days. Service specific classification data is not available. Figures for the Air Force may be high since many of their hospitals are small and may not have the same patient classification rates as Army facilities.

[2]Army estimates are based on a line by line count of Army manpower requirements documents for hospitals in Health Services Command. Overseas requirements were estimated based on similar CONUS requirements. This equated to 41 percent of the JHMS inpatient application. Air Force estimates were based on a line by line count of requirements documented in USAF Manpower Standards and equated to 37 percent of JHMS inpatient application. Consistent with the other services, 40 percent was applied to Navy to estimate requirements.

[3]Nurse anesthetists represent current service requirements.

Military Department End Strength

The Military Departments each have specific procedures for determining authorizations. Funding of budgeted end strengths is balanced with other service manpower priorities. The information presented in table 5-3 reflects the active duty budgeted and actual end strengths.[4,5,6]

Table 5-3
Nurse Corps Budgeted and Actual End Strengths
FY 1988

ACTIVE DUTY
NURSE CORPS DATA FORMATS

Discipline	Budgeted End Strength				Actual End Strength (duty)			
	Army	Navy	USAF	DOD Totals	Army	Navy	USAF	DOD Totals
Nursing Service Administrator	234	33	296	563	267	72	307	646
Nurse Anesthetist	273	137	366	776	252	115	275	642
Operating Room Nurse	372	245	351	968	356	220	348	924
Pediatric Nurse Practitioner	38	24	102	164	28	17	103	148
Family Nurse Practitioner	0	48	0	48	0	25	0	25
OB/Gyn Nurse Practitioner	28	16	117	161	27	12	121	160
Primary Care Nurse Prac.	47	4	46	97	51	1	27	79
Nurse Midwife	9	4	62	75	15	5	48	68
Flight Nurse	0	0	168	168	0	1	165	166
Nursing Education	0	90	66	156	144	125	73	342
All Other Nurses	3578	2873	3711	10162	3403	2475	3822	9700
TOTAL NURSE CORPS	4579	3474	5285	13338	4543	3068	5289	12900

Summary

The peacetime cost analysis approach parallels a method used in the Health Professions Special Pays Study submitted to Congress on December 1, 1988. The second looks at nurse requirements from the perspective of the Joint Health Care Manpower Standards now under development. These nursing standards are based on patient classifications and the intensity of nursing care required.

The workload- based studies are constructed with historical data, describing what the workload was and what the staffing should have been at that time. This includes the civilian nurses employed by the Military Departments. Adding nurses to the described levels will meet the workload requirements of 1987, not the workload requirements of the 1990s.

Nurse requirements cannot be considered in isolation of other medical department personnel. For example, increasing the numbers of physicians to do inpatient surgery increases the demand for nurses to care for these patients before, during, and after surgery.

All presentations depict a shortage of nurses in the Department of Defense.

Endnotes

1."Peacetime Requirements for Physicians and Nurses in the DoD Direct Care", Office of Assistant Secretary of Defense for Program Analysis and Evaluation Memorandum, 6 February 1989.

2.Ibid.

3.U. S. Department of Health and Human Services, Secretary's Commission on Nursing, Final Report, Vol I, (Washington, D. C.: December, 1988).

4. "Nurse Data for Preparation of Congressional Report on Health Professional Special Pays", Department of Army Memorandum, 2 December 1988.

5. "Nurse Corps Data for Preparation of Congressional Report on Health Professional Special Pays", Department of Navy Memorandum, 30 November 1988.

6."Nurse Data for Preparation of Congressional Report on Health Professional Special Pays", Department of the Air Force Memorandum, 16 December 1988.

CHAPTER SIX

FORCE MANAGEMENT

This chapter discusses the complexities involved and the systems used to manage and shape the force structure of the nurse corps. It proposes an ideal, unconstrained professional force structure that accommodates today's evolving nursing profession within the military environment. Further, each nurse corps has developed a service unique force structure that is designed to meet their specific requirements in a steady state environment.

This study concludes that to develop a viable professional nurse force that will ensure quality health care delivery through the accession and retention of experienced nurses, the Department of Defense (DoD) must continue with its endeavors to develop innovative solutions to compete with the civilian sector for increasingly scarce resources.

Officer Personnel Management

The principal purpose of the Defense Officer Personnel Management Act (DOPMA), which became effective September 15, 1981, was to maintain a qualified, numerically sufficient, and efficiently distributed peace time officer corps through the standardization, over time, of officer personnel management provisions among the Armed Forces.[1] Predicated on the need to establish common career expectations, DOPMA specifically addresses appointment, promotion, separation, retirement, and equality of treatment between men and women. It provides for the creation of a career force by 11 years of service at the discretion of the military department service secretary. Additionally, it maintains the 1967 provision that excludes physicians and dentists from the computation of control grade ceilings, recognizing the unique problems associated with recruiting and retaining these officers. Through DOPMA, an officer personnel management system that addressed common provisions for the accession, retention, and attrition of officers within the Department of Defense was created.

With the enactment of DOPMA, Congress recognized the brittle balance among the three tenets of promotion planning : (1) authorizations, selection opportunity, and promotion flow point or timing point; (2) reasonable and comparable career patterns among the forces; and (3) retention. While continuing the up-or-out promotion policy, DOPMA establishes a vacancy driven promotion system with promotion opportunity and flow point guidelines and provides for retention, continuation and counselling for fail-of-select officers.

DOPMA control grade tables for grades O-4 through O-6 were constructed around actual retention rates at a time when the Armed Forces were experiencing high loss rates.[2] The Services were not keeping the experienced officers they required. Congress recognized that the grade model was constructed with less than optimal retention rates.[3]

Table 6-1 below displays the DOPMA guidelines for opportunity and flow point objectives for use by each service. However, the grade tables and allocation of control grades differ among the Services and are predicated upon congressionally-established end strengths.

TABLE 6-1
DOPMA PROMOTION GUIDELINES

Grade	Opportunity	Flow Point
O-4	80% (+5%)	10 +/- 1 YR
O-5	70% (+5%)	16 +/- 1 YR
O-6	50% (+5%)	22 +/- 1 YR

Table 6-2 provides a comparison of the actual in-zone promotion selection rate and flow point for each of the nurse corps as submitted to the Department in the Fiscal Year 1987 Annual Defense Officer Promotion Report.

TABLE 6-2

ACTUAL SELECTION RATE/FLOW POINT IN ZONE SELECTEES

	Selection Rate	Flow Point
Army Nurse Corps		
O-4	64.5%	12 yrs 4 mos
O-5	51.4%	17 yrs 3 mos
O-6	52.7%	22 yrs 4 mos
Navy Nurse Corps		
O-4	63%	10 yrs 11 mos
O-5	60%	15 yrs 6 mos
O-6	38%	21 yrs 10 mos
Air Force Nurse Corps		
O-4A	76.1%	10 yrs 9 mos
O-4B*	69.4%	10 yrs 9 mos
O-5	41.4%	15 yrs 9 mos
O-6	31.4%	20 yrs 3 mos

*Two boards held

Source: OASD(FM&P) FY 1987 Annual Defense Officer Promotion Report

All three Services are experiencing lower and slower nurse corps selection rates compared to DOPMA objectives. The Services have taken management actions not only to stay within the control grade numbers specified by DOPMA, but also to stay within the grade numbers that have been further modified by each Service. This has resulted in a reduced selection rate to grade O-4, which in turn forces higher attrition at the O-3 level; a negative message to the junior officers of each corps. This phenomenon is not unlike similar problems being experienced by other competitive categories within each service. However, the impact of the national nurse shortage, its implications for retention and recruiting, and the ability to grant constructive service credit within each nurse corps challenges nurse force management.

Force Structure

Figure 6-1 provides a graph of the DOPMA force structure as derived for the Report of the Committee on Armed Services to Accompany S.1918.[4] The graph illustrates how a cohort of 100 officers entering the service each year will decrease through normal and forced attrition over a 35 year career. The promotion opportunities and flow points from Table 6-1 were applied.

As illustrated in Figure 6-1, the DOPMA force structure assumes the accession of large numbers of new college graduates that the military departments will train and educate to meet their requirements. This recruiting policy is especially successful for those military specific career specialties such as infantry, surface warfare, and aviation. Nurses, however, are accessed because of their basic professional educational preparation. Members of the nurse corps, like the other officers of the medical department, chaplains, and lawyers, for example, receive their specialty education mainly in the civilian sector and remain interchangeable and competitive with their civilian peers.

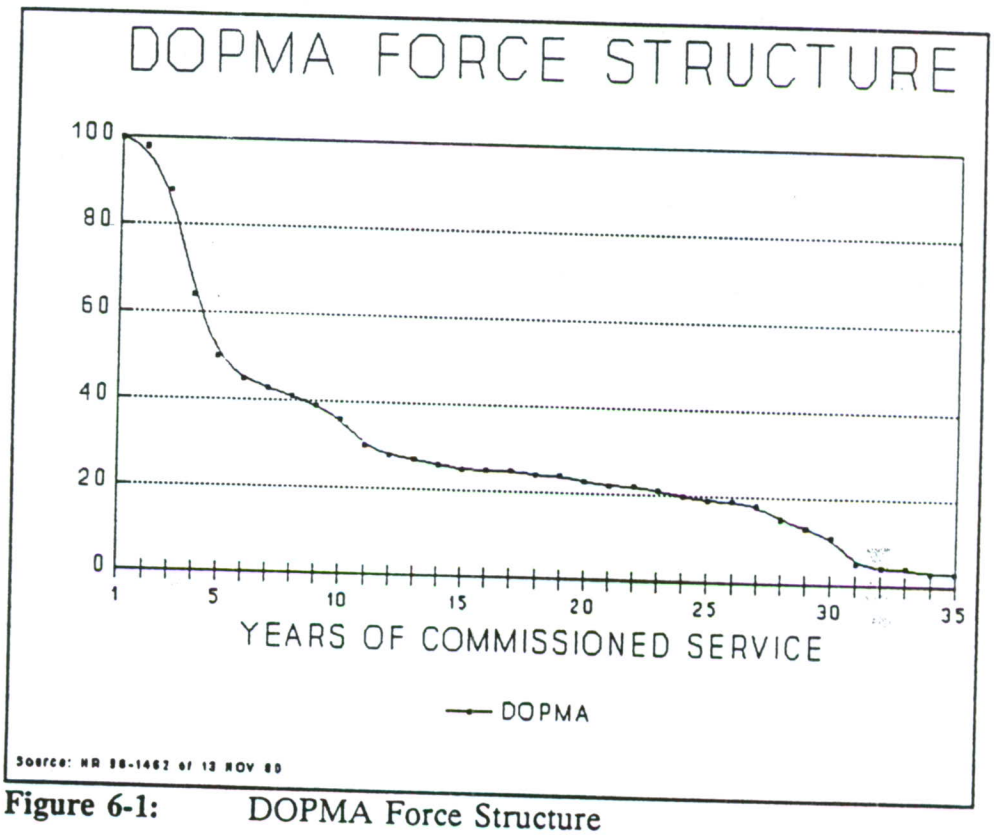


Figure 6-1: DOPMA Force Structure

Until recently the military nurse communities have been able to follow the DOPMA model by recruiting large numbers of new nursing graduates at grade level O-1, and few experienced registered professional nurses with constructive service credit. The national nurse shortage and the changing demographics of the professional nurse population are adversely affecting this practice. The supply of professional nurses is not keeping pace with demand. As cited earlier, the enrollment of baccalaureate students with no previous background (generic students) has declined 34.2 percent over the last five years; graduates have declined 15.1 percent.[5] Enrollment of registered nurses (RN students) pursuing a baccalaureate degree in nursing has declined 4.8 percent over the past five years; graduates have increased 7.3 percent.[6] Additionally, the Secretary's Commission reported that the unemployment rate for all registered nurses declined from 1.9 percent in 1984 to 0.9 percent in December 1987.[7] Although the Air Force exceeded its recruiting goal in Fiscal Year 1988, the Navy fell 38 percent short of goal; the Army 6.7 percent. The number of nurses accessed during the first quarter Fiscal Year 1989 for all three services is 10 percent less than nurse accessions during first quarter Fiscal Year 1988 leading to increased concern about reaching the Fiscal Year 1989 required level.

Nursing is a rapidly evolving profession driven by continued advances in scientific theory, technology, and knowledge. The old belief that one nurse can be readily substituted for another without regard to adequate clinical and educational preparation is no longer tenable. Current therapeutic, diagnostic, and care practices require the immediate and continued presence of nursing professionals knowledgeable and experienced in specific specialty areas. As Sheryl Feutz wrote in her article "Nursing Work Assignments: Rights and Responsibilities":

> "Nurses are expected to comply with minimum nursing standards as established by their professional nursing organizations, state regulations, and the Joint Commission on Accreditation of Hospitals (JCAH) or American Osteopathic Association where applicable. Failure to meet minimum standards exposes staff nurses, nurse executives, and health care institutions to liability. This potential liability also extends to the delegation of patient care assignments."[8]

In her book, From Novice to Expert, Patricia Brenner has defined five stages of professional nurse development: novice, advanced beginner, competent, proficient, and expert. The novice enters the clinical environment with little or no experience. Professional development grows through the application of skills, performance of tasks and observation of patients' reactions to intervention. Theoretical and scientific knowledge form the basis upon which years of experience lead to expert judgments and actions. Throughout this process, preceptors or mentors (experts) are required in the clinical area for consultation and guidance. The experts are needed not only to guide the new graduate nurse but also for the nurse who changes specialty areas.[9]

The development of the civilian registered professional nurse closely parallels that of a nurse corps officer as displayed in Figure 6-2. The similarity of the progressive development of clinical skills, knowledge, and independent judgement is notable in both cases. Proficiency is normally attained in the 7 to 15 year time frame. In addition to the increasing responsibility and authority for both patient care and subordinate staff development (shared by both civilian and military nurses), military-unique requirements are also required of the military officer. As illustrated in Figure 6-2, professional registered nurses in the mid-career range are critical to the military. The reduced promotion opportunity for selection to O-4 forces a lower selection opportunity upon this group of experienced professionals who are highly competitive in the civilian sector.

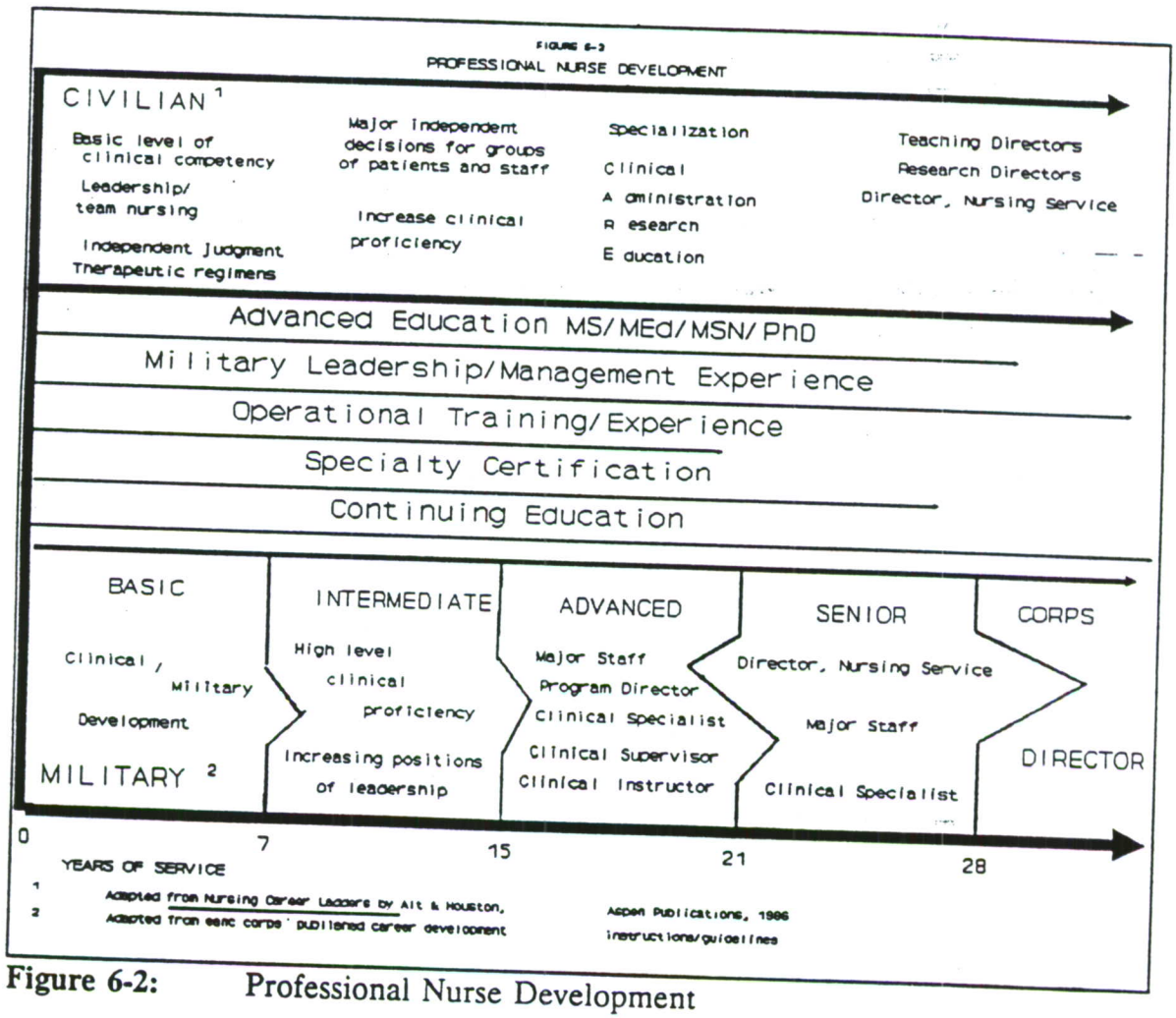


Figure 6-2: Professional Nurse Development

While emphasis on recruiting and retaining experienced nurses is necessary to meet end strength and health care requirements, this policy causes difficulty with personnel management. As more experienced nurses enter at grades greater than O-1 (due to constructive service credit), promotion opportunity and flow points deviate from DOPMA guidelines. The decision to recall to active duty excellent nurse clinicians with proven military performance also hinders promotion flow. **Equitable career pathways cannot be assured for these officers (nor for other officers; each non-due course officer accessed to active duty at a grade other than O-1 compounds promotion and personnel planning problems). The very measures that Congress has provided through expanded constructive service credit to help meet end strength by accessing experienced nurses further challenges force management within DOPMA parameters.**

Figure 6-3 displays an ideal, steady state, professional nurse force structure that permits accession of non-due course officers while capitalizing on a **strong mid-grade force with the professional clinical and military experience required of today's military nurse**. The professional structure is the ideal in an unconstrained environment developed by subject matter experts of the Department's nurse corps. This structure was constructed considering the progressively greater difficulty of recruiting large numbers of inexperienced nurses; the value of accessing and retaining experienced officers; and, adherence to rising professional standards that require increasingly higher numbers of specialized nurses in the clinical environment. The ideal professional structure was developed considering a "steady state" or no growth environment and the efficiencies of quality health care delivery during a period when the private sector is spending a significant portion of their budgets on the recruiting and orientation of nurses.[10] However, as demonstrated in Chapter 7, all three nurse corps are currently confronted with an immediate future of growth which will further challenge our personnel management strategies.

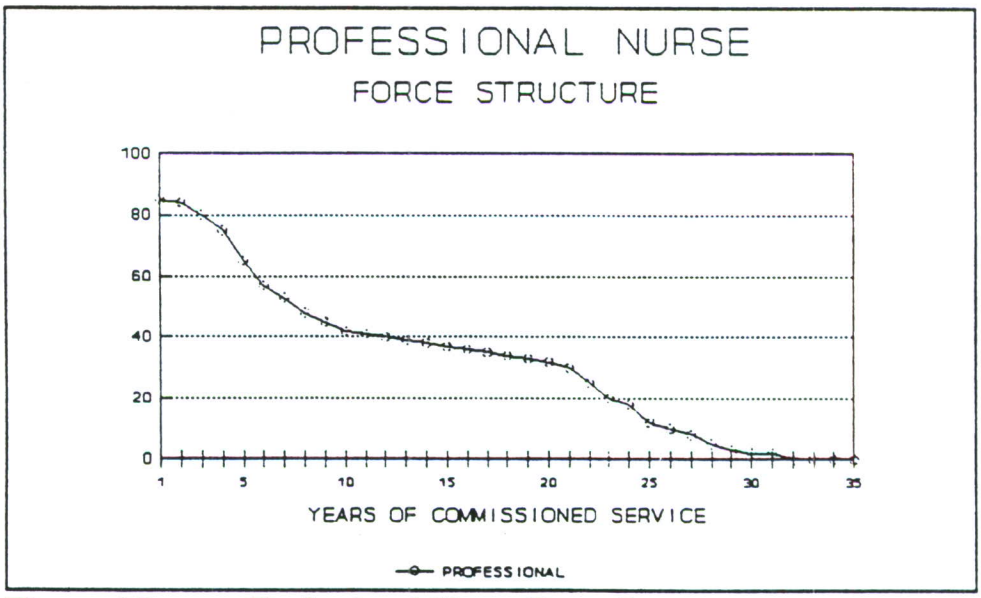


Figure 6-3: Professional Nurse Force Structure

Figure 6-4 provides a comparison of the professional force structure to the DOPMA force structure from Figure 6-1 and assumes that total end strengths under both curves are the same in a steady state environment. The professional force structure emphasizes the greater experience level required and accommodation of decreased accession with retention of an experienced nurse force. It also assumes a cost savings of reduced turnover inherent in the retention of qualified military nurses. With higher retention of our nurses after initial obligation as well as throughout the O-3 and O-4 grade levels, the DoD gains more experienced active force. Future education and training costs can then be directed at building upon the basics as opposed to training new personnel in the basics.

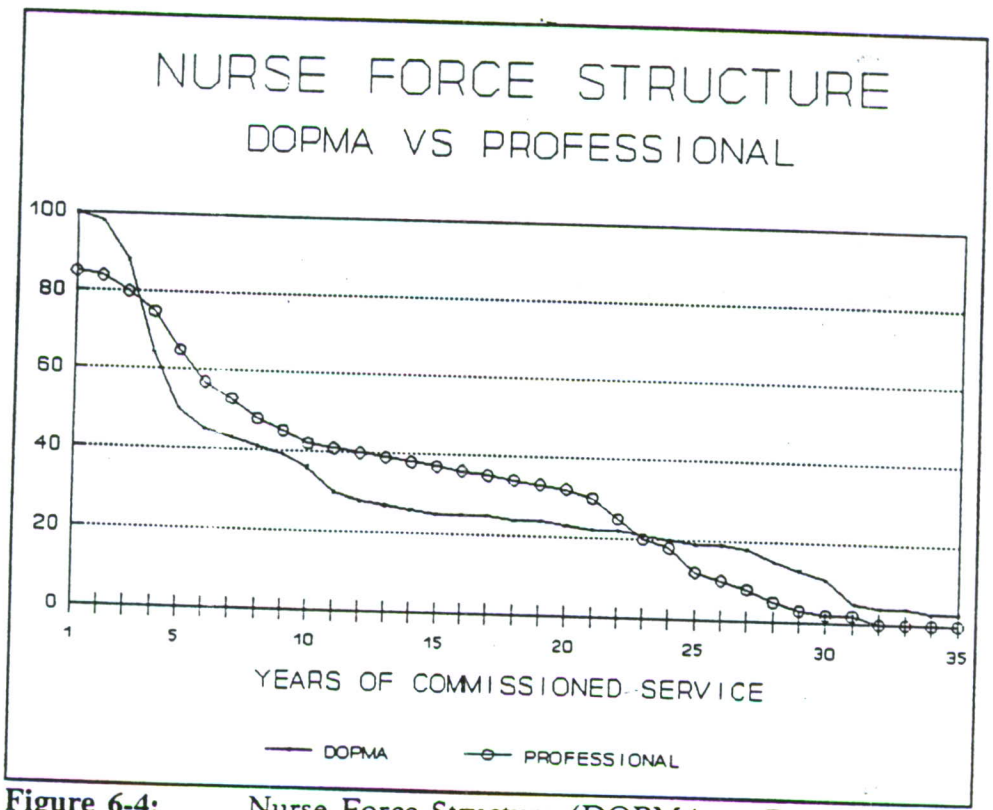


Figure 6-4: Nurse Force Structure (DOPMA vs. Professional)

Each nurse corps is in the process of validating their billet structure to more accurately reflect the years of professional experience necessary to meet the increasing demands and responsibilities inherent in military nursing. Figures 6-5, 6-6 and 6-7 display projections of the individual corps' force structures required to meet the various demands of military nursing, while providing viable career pathways with today's continuation rates, authorized force levels, and DOPMA promotion opportunities and flow points. The main differences between these projected forces and the DOPMA force is the expectations of retirement at the 20 year point, and in the Navy and Army lower accession requirements.

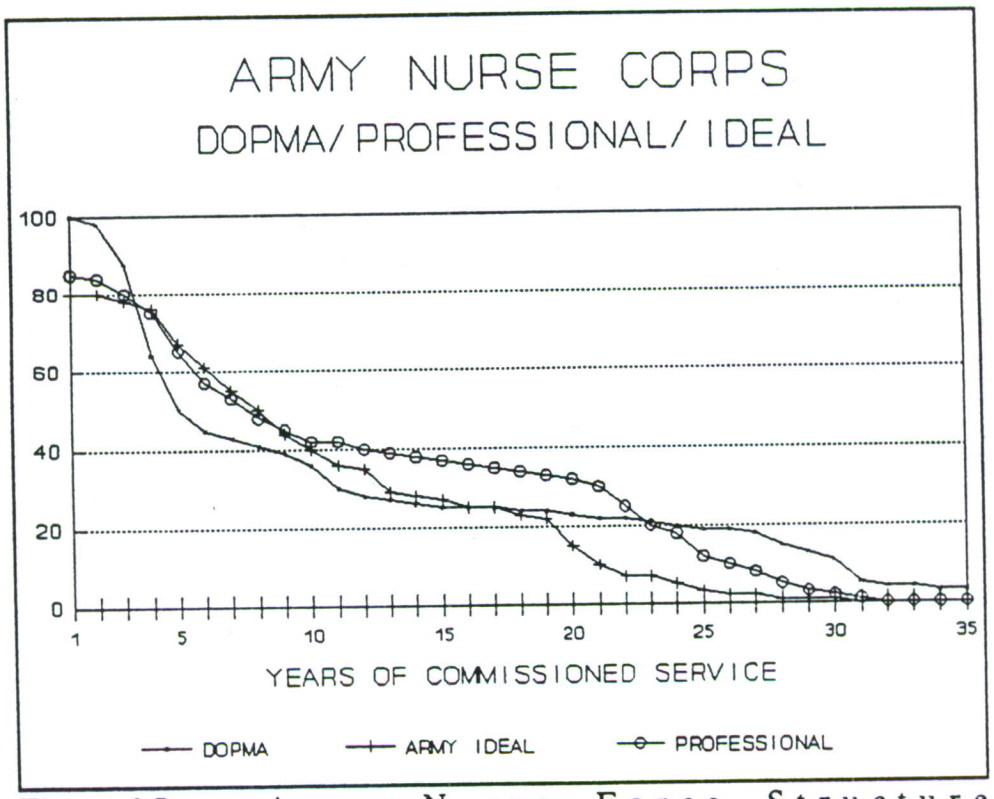


Figure 6-5: Army Nurse Force Structure DOPMA/Professional/Ideal

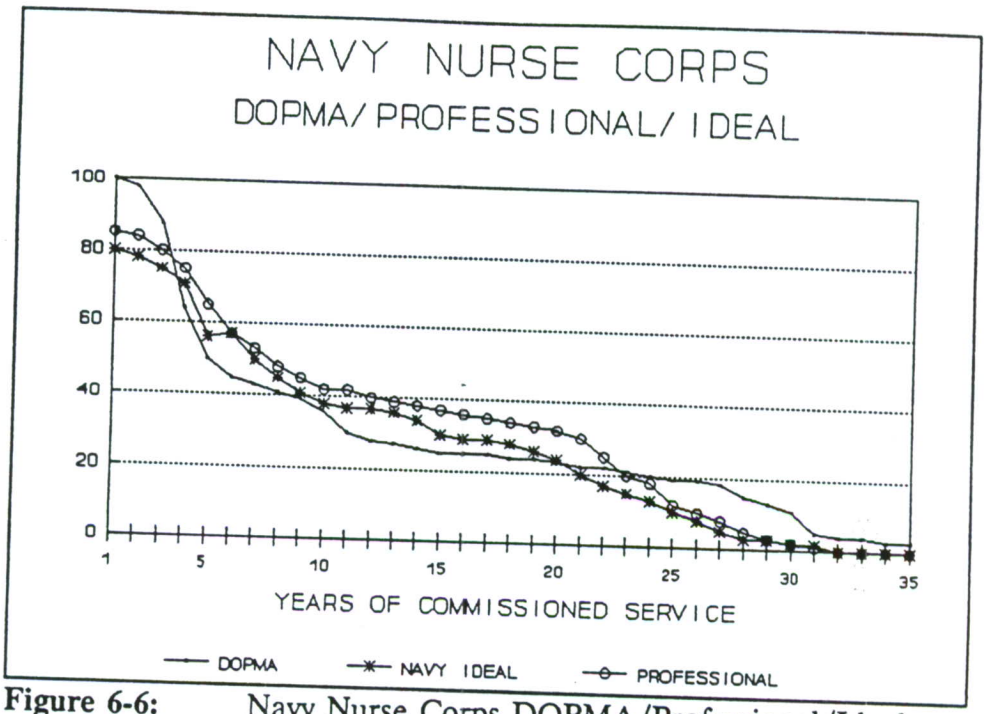


Figure 6-6: Navy Nurse Corps DOPMA/Professional/Ideal

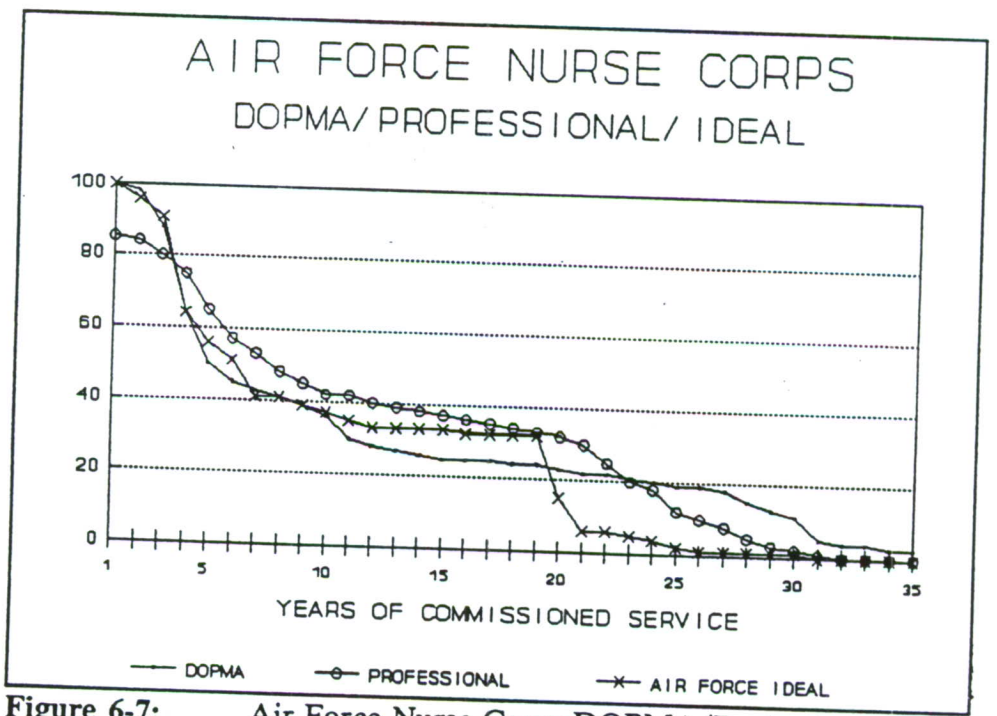


Figure 6-7: Air Force Nurse Corps DOPMA/Professional/Ideal

The Sixth Report to the President and Congress on the Status of Health Professionals in the United States published in June 1988, projects that the supply of registered professional nurses prepared at the baccalaureate level will be short of requirements through the year 2020 with a significant drop in the year 2000.[11] Consequently, the Department will be competing with all other employers of nursing professionals for scarce resources.

Summary

The increasing complexity of the nursing profession is driving up the demand for experienced military nurses, that is, those with 7 to 15 years of experience. This need can be met in two ways: (1) having the proper retention that will mature the force; and (2) accessing sufficient numbers of experienced nurses through effective and efficient use of constructive service credit. Continuing priority should be given to Service validation of nurse corps' billet structures; better definition of nurse corps force management issues; and, potential legislative remedies.

Endnotes

1. U.S., Congress, Senate, Committee on Armed Services, Defense Officer Personnel Management Act, S. Rept. 918, 13 Nov 80.

2. Ibid.

3. Ibid.

4. Ibid.

5. Barbara K. Redman, Kathleen M. Neill, and Sarah Haux, Report on Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing 1984-1989, (Washington, DC: American Association of Colleges of Nursing, 1989), pp. 14-15.

6. Ibid.

7. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Final Report, Vol I, (Washington, DC: December 1988).

8. Sheryl A. Feutz, "Nursing Work Assignments: Rights and Responsibilities", Journal of Nursing Administration, 18 (April 1988): 9.

9. Patricia Brenner, From Novice to Expert, (Menlo Park: Addison-Wesley Publishing Co., 1984).

10. F. Theodore Helmer, and Patricia McKnight, "One More Time-Solutions to the Nursing Shortage", Journal of Nursing Administration, 18 (November 1988): 7-15.

11. U.S. Department of Health and Human Services, Sixth Report to the President and Congress on the Status of Health Professionals in the United States, (Washington, DC: Division of Nursing, June 1988) , pp. 10-73.

CHAPTER SEVEN

RECRUITMENT AND RETENTION

General

Nurse shortfalls now exist in both the active and reserve forces which, if not corrected, will have a major impact on the Military Health Service System's (MHSS) ability to perform both wartime and peacetime missions. The military nurse corps are also beginning to feel the effect of the national nursing shortage and now must compete more effectively than before for the available supply of civilian sector nurses in order to meet accession requirements.

The Department of Defense, as well as the Congress, has given priority to the critical nurse shortage. The most recently validated information based on requirements data first developed in 1986, show a Total Force shortfall of over 30,000 (the great majority in the Reserve Components and needed for mobilization). Remedial initiatives in legislation are described in Chapter 4.

In the active force, significant implications of the shortage have been experienced in nurse anesthesia, operating room, medical/surgical, mental health, obstetric, and critical care nursing in DoD medical treatment facilities. Beneficiaries are suffering reduced access to care, and all health care disciplines are experiencing negative affects on their work environment, their morale, and their professional satisfaction in the MHSS.

A major reason for the difficulty in retaining experienced nurses with critical skills in the active force is the lack of monetary incentives, such as special pays offered to other military specialists in short supply, that would bring specialty nursing salaries in line with those of the civilian sector.

Recruitment

Accessions

Except for certain specialties such as nurse anesthesia, the military services have not until now suffered great difficulty in meeting their annual nurse recruiting goals. The Navy Nurse Corps however, has not met accession goals since 1985; the Army did not meet their goal for FY88; and the Air Force Nurse Corps, although able to exceed total numbers of the accession goal, has been unable to meet goals for nurse anesthetists for several years.

Table 7-1,[1,2,3] and Figure 7-1,[4,5,6] show nurse corps accessions from 1980-1988. The accession figures for both Army and Air Force include those attained through ROTC scholarships.

TABLE 7-1

NURSE CORPS ACCESSIONS 1980-1988

Year	Goal[1]	Accessions[2]	Achieved (2/1)%
ARMY			
1980	---	425	3
1981	410	467	139
1982	401	453	129
1983	500	466	93.2
1984	610	631	103
1985	468	511	109
1986	533	536	100
1987	510	537	105
1988	510	478	93.7
1989	600		
NAVY			
1980	286	286	3
1981	198	198	100
1982	250	250	100
1983	445	445	100
1984	169	173	102
1985	308	308	100
1986	493	442	90
1987	264	256	97
1988	376	235	62
1989	406		
AIR FORCE	*		
1980	567	567	100
1981	406	406	100
1982	670	670	100
1983	466	477	102
1984	456	674	147
1985	618	718	110
1986	629	697	110
1987	574	648	112
1988	641	753	117
1989	674		

Notes

1 = Total Goal - all sources
2 = Total Accessions - all sources
3 = Not computed, immature data, assume 100%
* = Air Force readjusts during the year to meet changing conditions

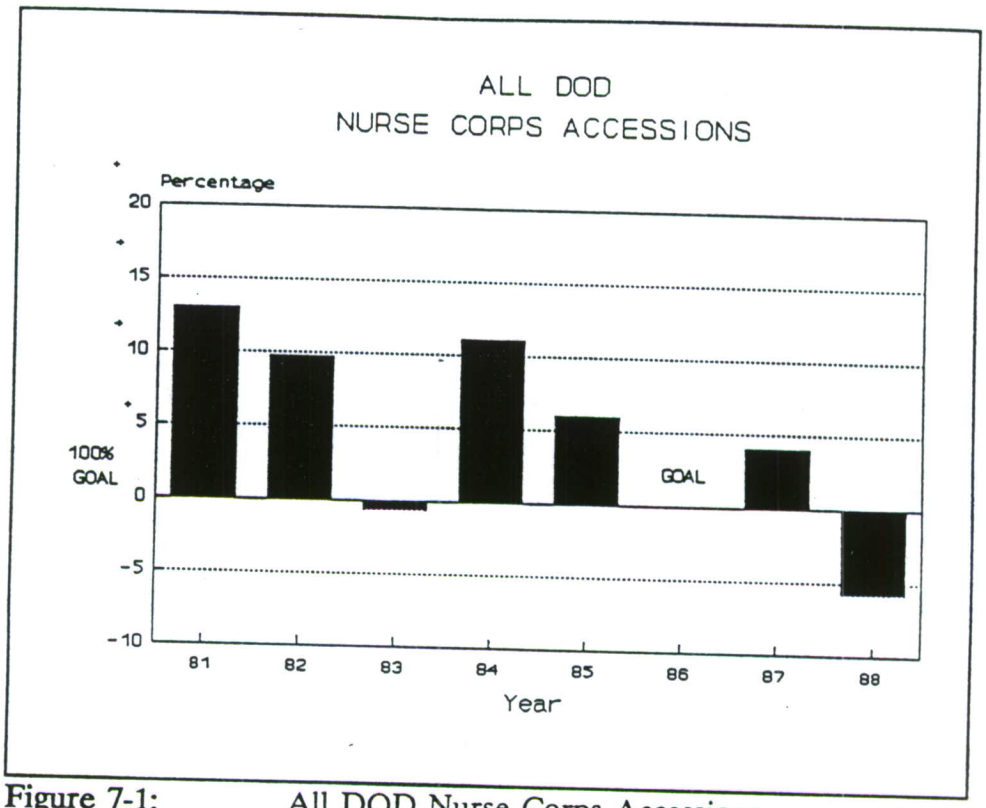


Figure 7-1: All DOD Nurse Corps Accessions

In all three Services, recruiters have begun to experience difficulty attracting both the number and mix of qualified nurses needed. Each individual recruited has required much greater time and effort. Because of current academic achievement patterns, a more individualized screening process is required to determine eligibility of candidates.

Competition for registered nurses is greater in large urban areas, such as the Northeast, where nurse salaries are much higher than national averages. Medical, dental, and educational benefits were once a strong incentive for considering military nursing; now many civilian institutions offer highly competitive benefit plans and some offer retirement options as well.

The FY 88 recruitment shortfall for the military active components reflects the same factors which are affecting the supply of nurses in the civilian community (figure 7-1). Age limitations and physical qualifications are additional factors that have an impact on the services' difficulty in meeting accession goals. In addition, DOPMA created a narrower recruitment population by setting constraints in grades O4 and above, which restricts the ability to recall reserve officers at current grade, and reduces the opportunity to give appropriate rank for experienced nurses with special knowledge and skills, thereby hindering potential "lateral" accessions.

Currently there is growth planned for each of the nurse corps, with the Army progressing to budget authorization of 4965 in FY 1989 and maintaining a steady state thereafter. The Navy is planning to grow to a budget authorization of 3543 in 1992, and the Air Force is planning to reach a budget authorization of 5817 in fiscal year 1992[7].

However recruiting is suffering badly. In the Army, 56 nurses, or 9.3 percent of the total 1989 goal, were accessed (at the same time last year 120 nurses or 23.7 percent of the goal had been reached). ROTC was able to award 210 or 62 percent of the nurse scholarships available in 1988. (Figure 7-2) In the Navy, 18 nurses, or 4.3 percent of the total 1989 goal, have been accessed (at the same time last year, 27 nurses or 7.2 percent of the goal had been reached). In the Air Force, 40 nurses, or 5.9 percent of total 1989 goal, have been accessed (versus 119 nurses or 19.5 percent at the same time last year)[8,9,10].

Military Department Initiatives

Annual recruitment programs must respond to many factors affecting the nurse corps in the Military Departments. Changes in budgeted end strength, unexpected losses, nurse specialist requirements, training programs, and prevailing conditions in the civilian market are monitored, analyzed and answered. A number of initiatives for nurse corps recruitment have been implemented or proposed. Some Service unique characteristics or special mission requirements (such as flight nurse, sea duty, parachute qualified) demand different emphasis on particular initiatives by each Service or may require individual initiatives.

Several common actions have been taken by the nurse corps. These include:

1. Implementation of constructive service credit in accordance with DODD-1312.2 which provides entry grade credit for professional work experience accrued after initial licensure, certification, or registration. Credit may be granted in amounts of one-half year credit for each full year of experience up to a maximum of three years of credit.

2. Actions to increase use of Reserve Officer Training Corps (ROTC) scholarships within each Service for support to nursing education of future accessions.

3. An increased emphasis on recruiting policies and programs affecting nurses. These include modifications to accession criteria, initial assignment policy liberalization, and proposals requesting additional resources for recruitment of nurses.

4. A study, currently underway, to determine the desirability of initiating a uniformed services school of nursing.

The recruiting command of each service provides the direct accessions portion of the total nurse accessions goal. The ROTC is another source of nurse corps accessions for the Army and the Air Force. Enlisted personnel programs are used to develop enlisted members to qualify for nurse corps accession.

Each service has implemented specific actions. The Army has changed its policy in order to ease access for qualified enlisted personnel; increased educational incentives for new accessions; added nurse anesthesia scholarships to the U.S. Army School for Nurse Anesthesiology for qualified candidates. The Navy has assigned a nurse officer to recruiting command (COMNAVCRUITCOM) January 1989; expanded numbers for personnel in Medical Enlisted Commissioning Program; and requested inclusion of nurses in Naval ROTC. The Air Force has moved nurse anesthesia and nurse-midwifery programs to graduate level education effective FY 89, and has continued a five-month nurse internship program for selected initial active duty nurses [11,12,13].

Summary

Flexibility which allowed the nurse corps to contend successfully with many challenges is reduced significantly by current conditions internal and external to the Armed Forces. The current supply and demand imbalance in the national nursing population is escalating the degree to which these factors will affect nurse corps recruitment achievements.

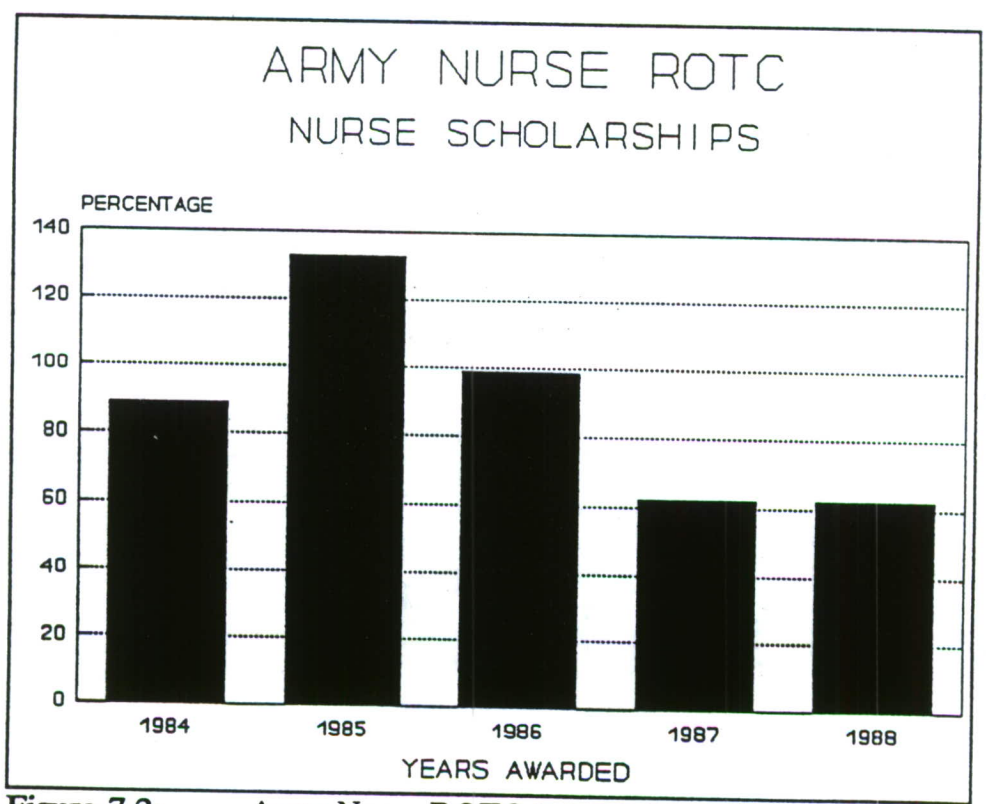


Figure 7-2: Army Nurse ROTC Scholarships

A rapid downward trend in nurse corps accessions is evident. The Army Nurse Corps and the Navy Nurse Corps did not meet budgeted end strength in fiscal year 1988. In 1989 the Air Force also may fail to reach goal. Being understrength in authorizations or inventory of nurse corps officers affects the capability of the MHSS to accomplish its mission in peacetime; it also affects mobilization readiness. A plan to avert further decay, through of an accession bonus and training-with-obligation plans, is addressed in Chapter 8.

Retention

Military Nurse Retention

The purpose of this section is to inquire whether the national nursing shortage and growing pay disparities have yet affected continuation rates in the nurse corps in early years of service or in particular military nurse specialist communities. It presents the results of surveys in the nurse corps, including management and environmental issues affecting military nurses within the MHSS.

Initial Retention

At the end of their initial obligation, military nurses make their first important retention decision. Figures 7-3, 7-4, and 7-5, display the reported retention rates, both at the end of initial obligation and one year beyond. The Air Force noted that since 1981, retention has "shown signs of erosion," and that "competition with civilian hospitals makes the nurse corps the most worrisome of the medical corps." The Navy noted that the "four year continuation rate for the FY 1984 cohort is 11 percentage points below the average for the 1977 through 1982 entry cohorts." The Army states that Nurse Corps continuation rates, "traditionally" lower than other Army officer corps, have been compensated by accessing more newly graduating nurses; continued us of this option may not succeed with today's constrained nurse supply situation.[14,15,16]

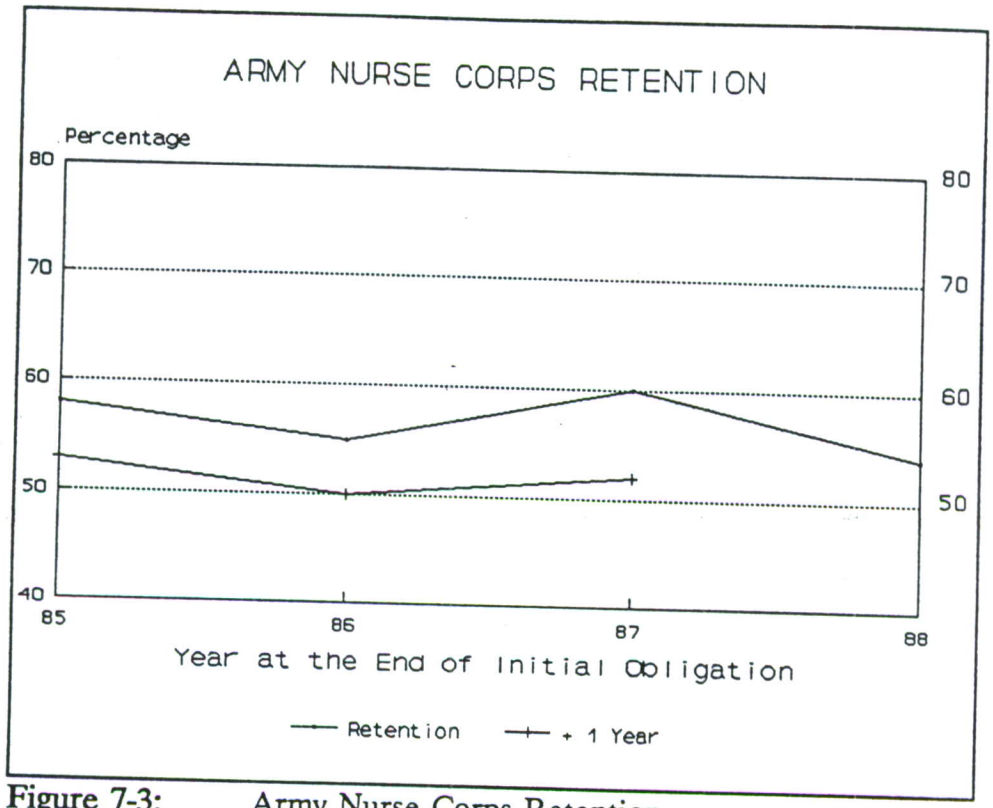


Figure 7-3: Army Nurse Corps Retention

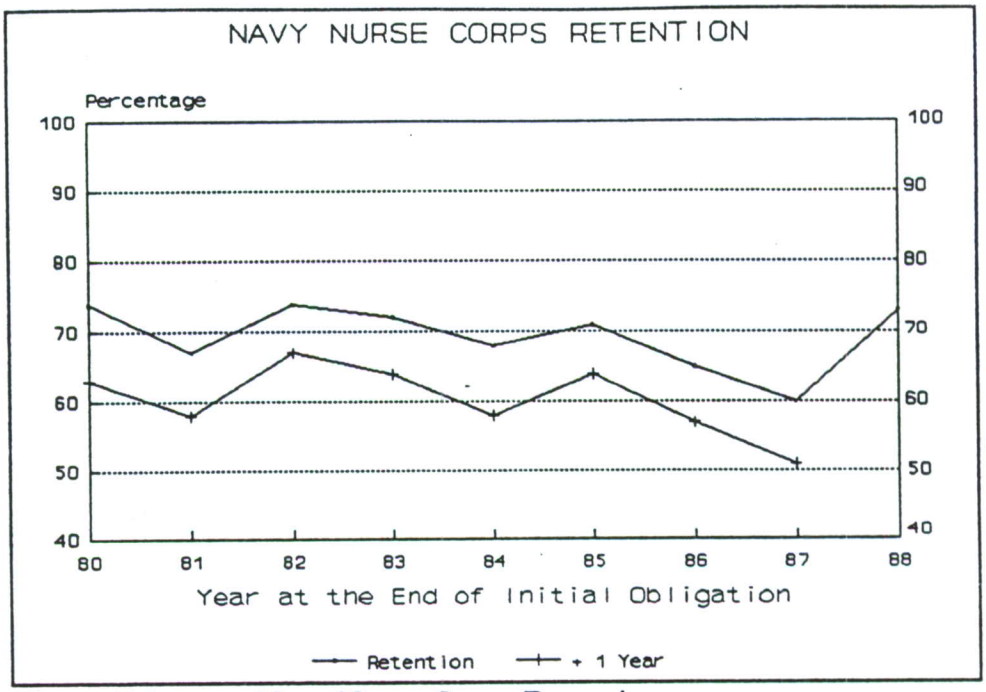


Figure 7-4: Navy Nurse Corps Retention

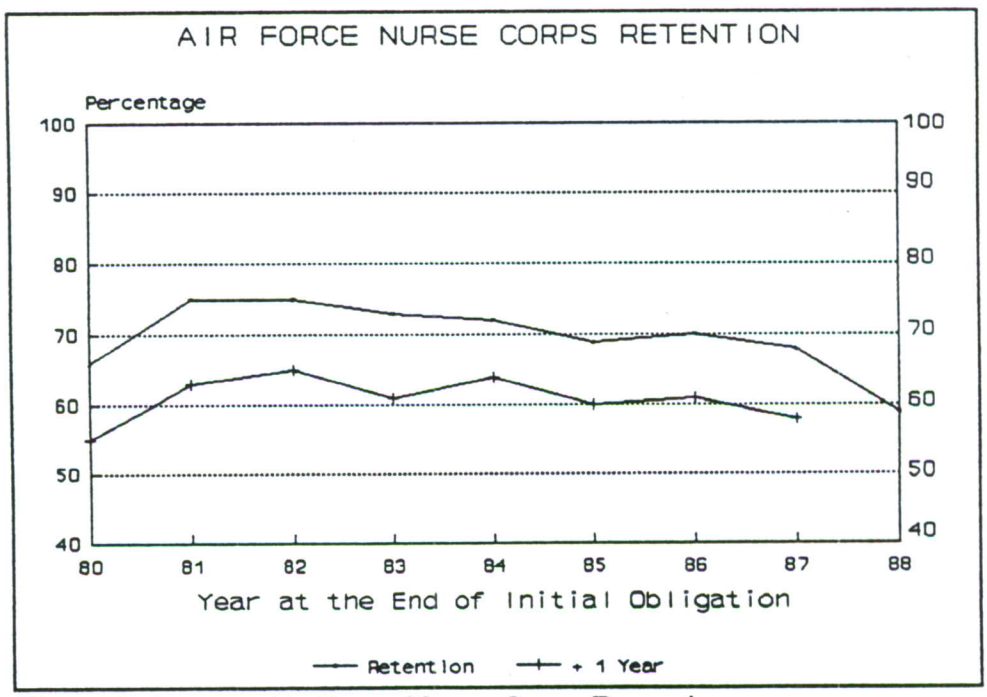


Figure 7-5: Air Force Nurse Corps Retention

Continuation

Continuation rates provided by the Military Departments, (Figures 7-6, 7-7 and 7-8) appear adequate and suggest that undersize year groups in the inventory generally are the result of low accessions. Each Department expresses concern about continuation because of events that affect officers' continuation decisions, and continuing effects of legislation. Past events include restricted continuation (so end strengths would not be exceeded), forced losses, and limits placed on accessions to meet budgeted end strength; effects of DOPMA tenure conditions combine to affect each corp's management of continuation.[17,18,19]

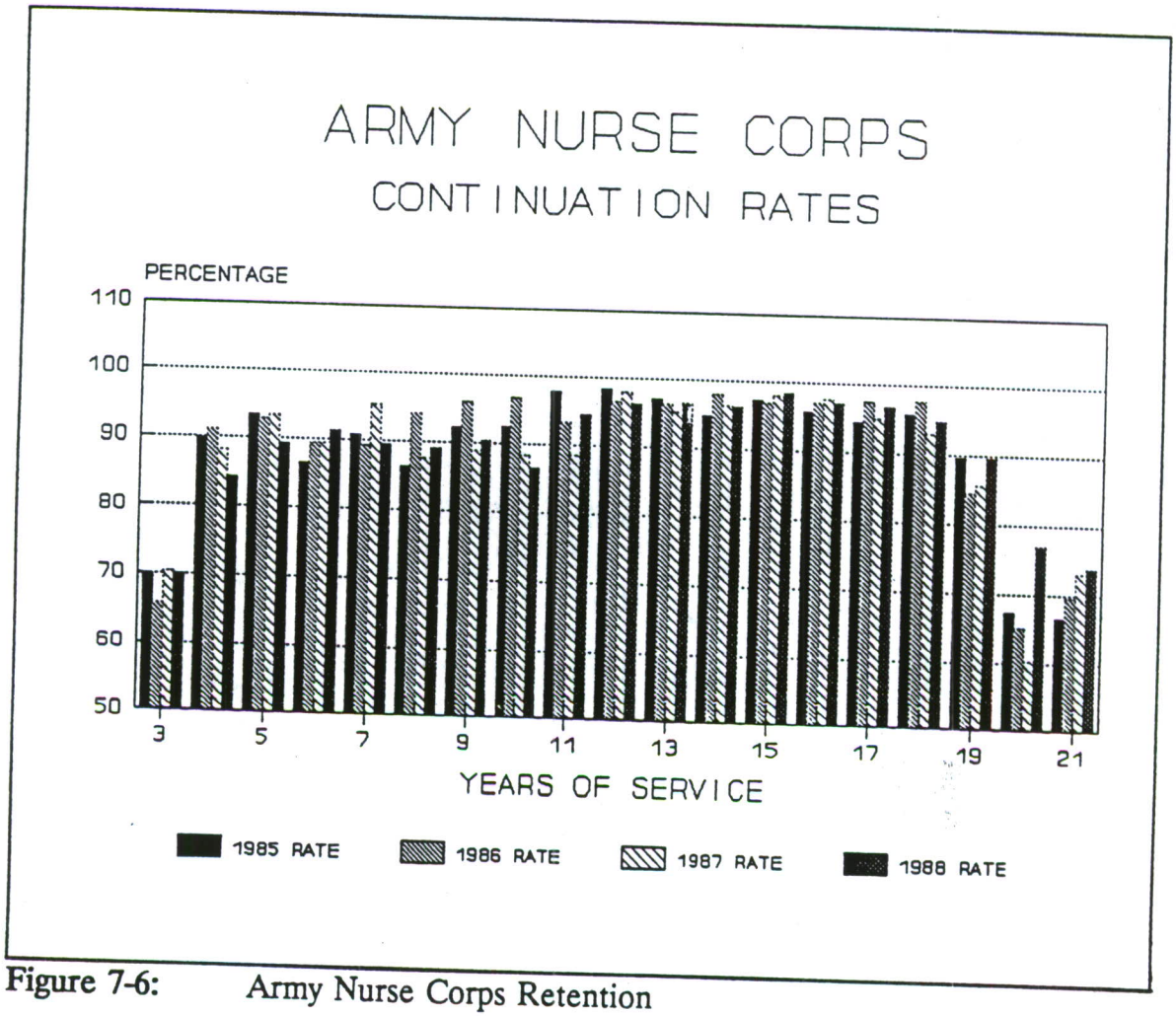


Figure 7-6: Army Nurse Corps Retention

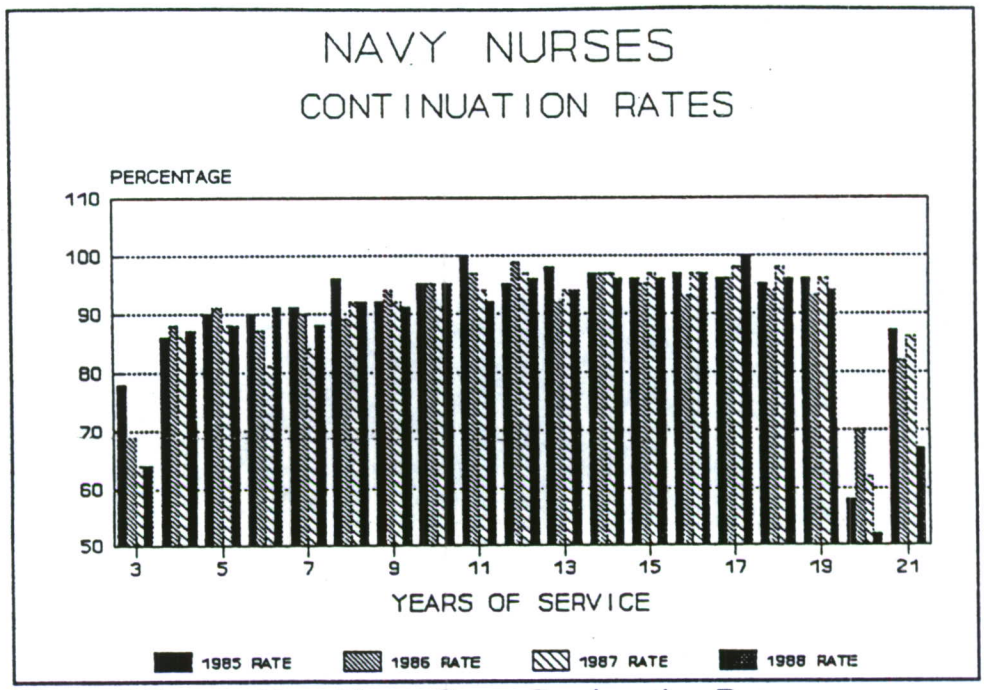


Figure 7-7: Navy Nurse Corps Continuation Rates

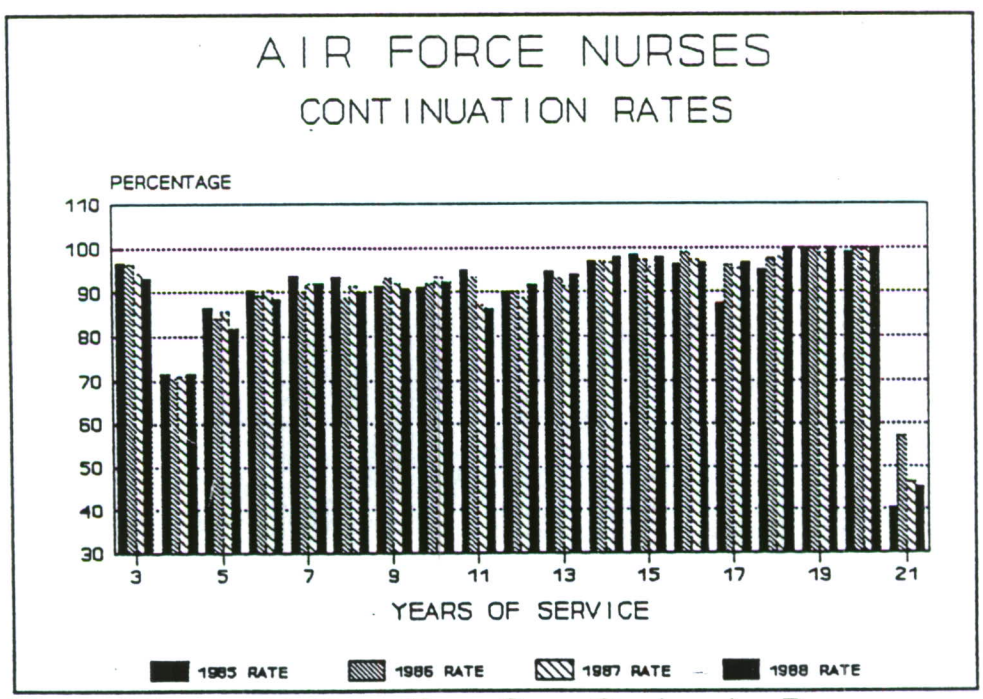


Figure 7-8: Air Force Nurse Corps Continuation Rates

Survey Findings About Retention

Studies conducted by the Military Departments and by the Department of Defense since 1984 reveal dissatisfaction among military nurses. The recent Department of Defense Health Professionals Special Pay Survey (1988)[20] showed lack of sufficient nursing personnel as a factor most nurse respondents (80 percent) selected as a significant reason for nurse corps members leaving military service. (In addition, 48 percent of physician respondents also selected lack of nursing personnel as a disincentive to remain in the service.) A large majority of nurses in this survey (81 percent) indicated that the quality and quantity of support staff are as important as compensation in retaining health care providers. More than 65 percent of nurses indicated dissatisfaction with the availability of both clerical and clinical support of their practice. Over two-thirds of all responding nurses indicated that the compensation system is a major factor in their career decision; over half of all responding nurses indicated lack of satisfaction with total pay and benefits.

These findings are supported by the 1988 Department of the Navy Medical Blue Ribbon Panel Report[21] which found that the increased time required for non-nursing tasks exacerbated job dissatisfaction of nurses in the Navy. Additionally, the panel reported that frustration over insufficient clerical support is a leading contributor to retention problems for medical and nurse corps officers. Inadequate clerical support for clinicians and nursing staff was cited as adversely affecting Graduate Medical Education. The same study affirmed that low recruiting and retention of Navy nurses is contributing to the problem of underutilization of medical treatment facilities and attributed the Navy nurse shortage to constricted promotion opportunities. The study found few career incentives except promotion.

Assignments

There are mandatory assignments which require the ability and flexibility to accept world-wide assignments, some on very short notice and some which do not allow accompaniment by family. In the past, these opportunities for travel were recruitment attractors, but in the modern era an increased number (well over 50 percent) of military nurses are married, and often have a military spouse and children. Assignment or co-location with a military spouse or children imposes additional constraints on careers and family commitments.

Summary

While not yet evident in the data (which was collected and recorded in FY 1988, and is, therefore, already a year old), the effects of the national registered nurse supply and demand imbalance, pay disparity in the early years, and the dissatisfactions which the surveys reveal are weighing more heavily, the military nurse retention issue must be considered serious. This examination disclosed prodromal indications, incipient retention problems which require attention, and a guarded forecast.

Survey data and other information from nurse corps officers reflect a wide variety of satisfiers and dissatisfiers. The most significant factors are quality of life issues, and the responses identify erosion of pay and benefits, more attractive civilian opportunities, quality and safety of patient care, and lack of nursing and support personnel in the health care environment. Surveys of military physicians have indicated similar concerns, and in addition cite inadequate numbers of nurses as a significant dissatisfier.

Promotion opportunities and arduous assignments also affect military nurse retention. To be able to attract and retain the required numbers of nurse corps officers, the services must improve those conditions which are the source of dissatisfaction and strengthen those conditions which provide satisfaction. The measures to accomplish these goals will be important for professional nurses; they are even more important to the quality of care for beneficiaries of the Military Health Service System.

Inventory

Effects of recruitment and retention policies, programs and actions are reflected in the inventory of each nurse corps. Figure 7-9 provides the Fiscal Year 1988 total DoD military nurse active component inventory.[22,23,24] Efforts continue to show an accurate display from service unique means of collecting and reporting data. Years of over-accession and over-continuation, of under-accession and under-continuation; forced losses to meet Congressional officer strength directions and changes due to DOPMA tenure and the external market result in accordion like efforts to accommodate changing programs and goals.

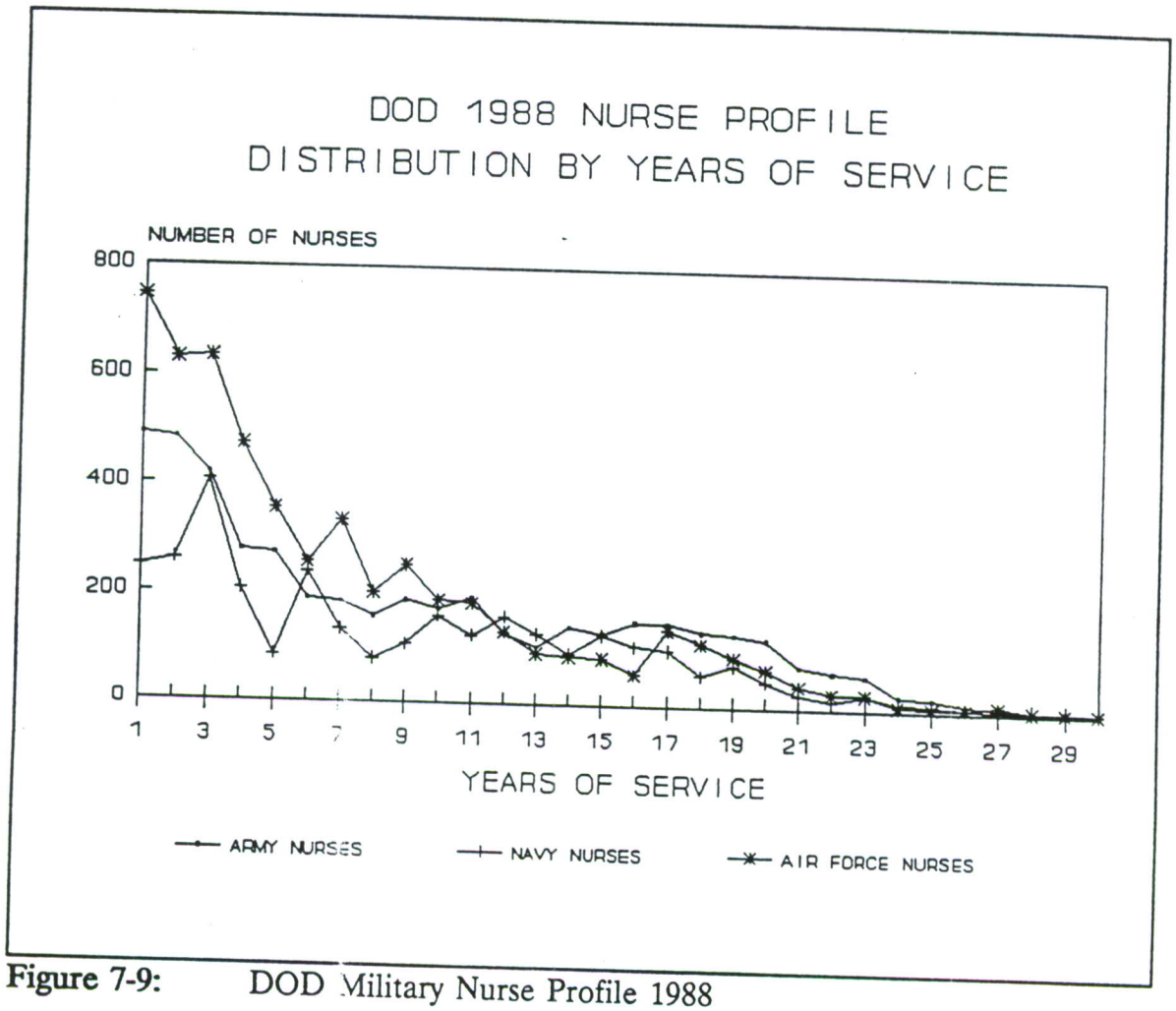


Figure 7-9: DOD Military Nurse Profile 1988

The current inventory and an ideal professional nurse plan for each nurse corps is depicted in figures 7-10, 7-11 and 7-12.

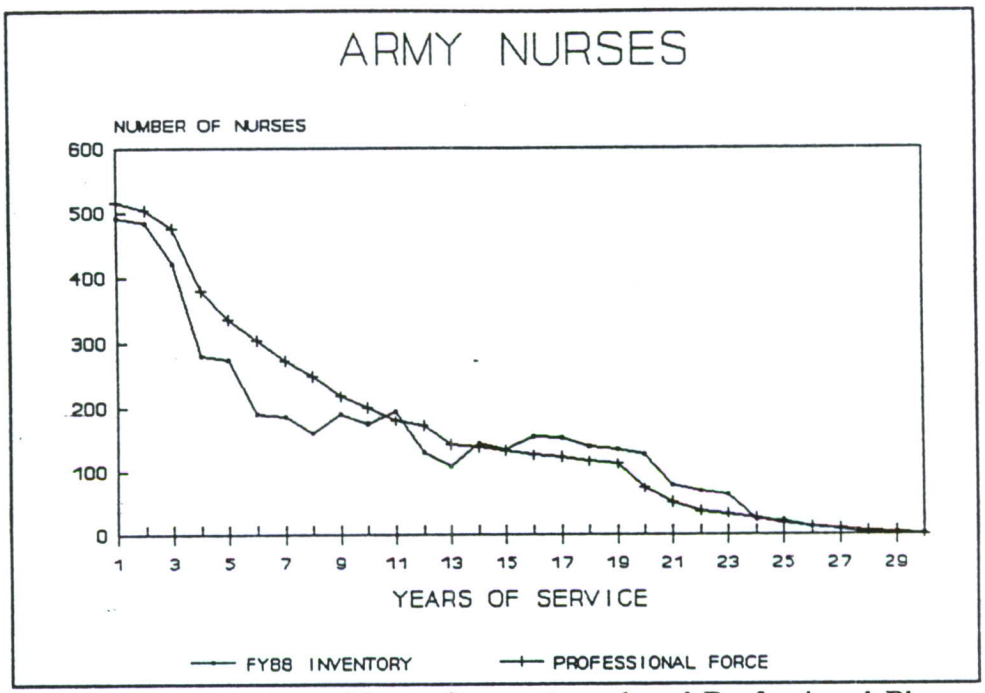


Figure 7-10: Army Nurse Corps, Actual and Professional Plan

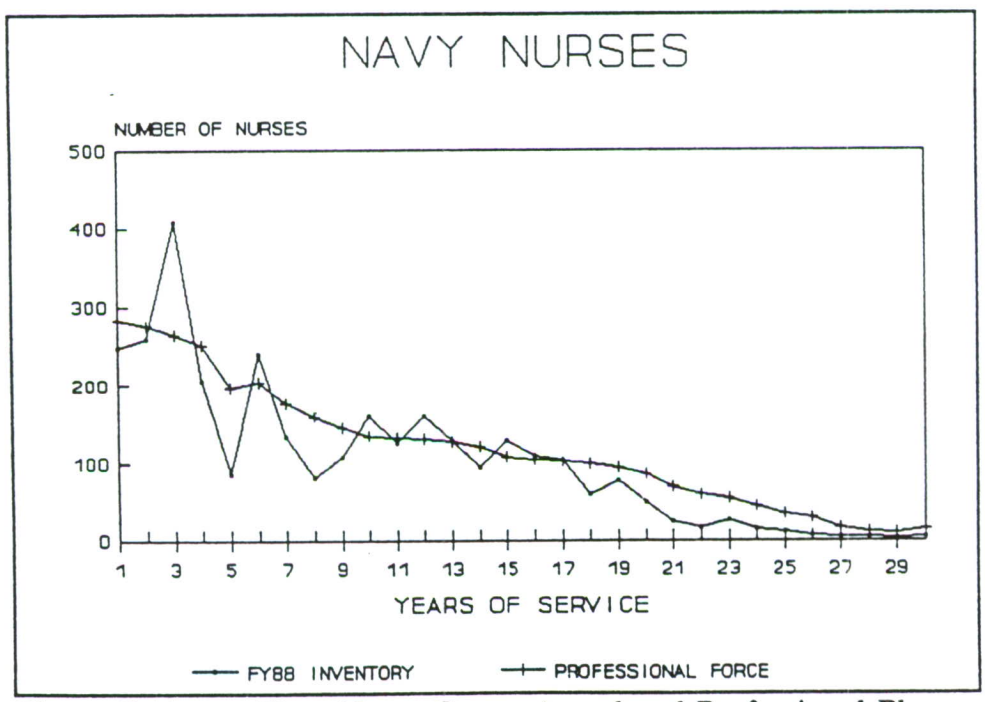


Figure 7-11: Navy Nurse Corps, Actual and Professional Plan

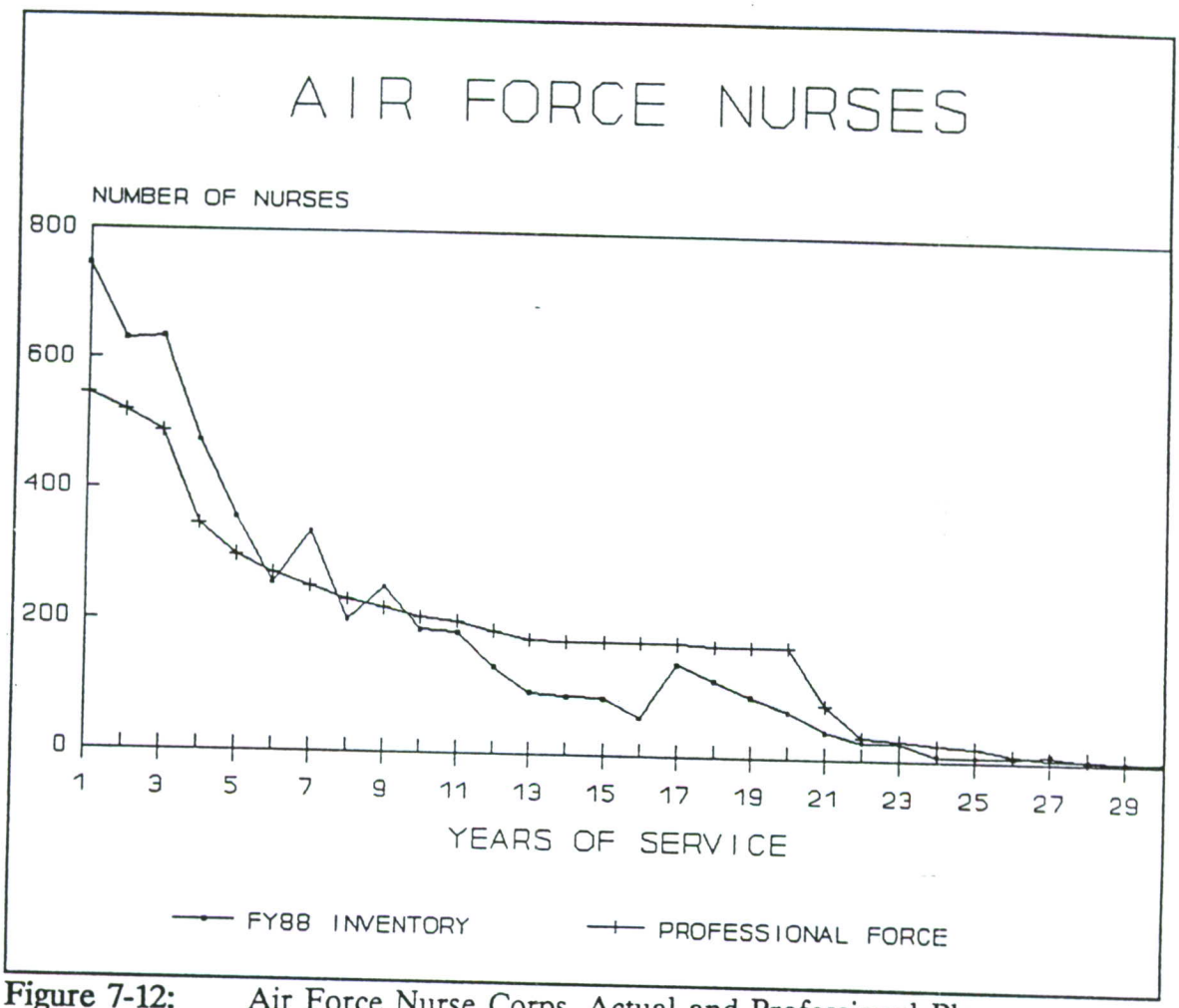


Figure 7-12: Air Force Nurse Corps, Actual and Professional Plan

The Army Nurse Corps (Figure 7-10) displays undersize year groups particularly where training and development should be occurring to prepare officers for the increasingly significant clinical and other responsibilities integral to mission accomplishment. Oversize year groups have been the subject of vigorous management actions, although these experienced nurses provide support to facilities, allowing beneficiaries of the Military Health Service system access to care.

The ideal professional nurse structure (Chapter 6) for the Army Nurse Corps is based on the findings of a position inventory completed in 1987, military force management principles, the tenets of military officer and professional nurse development, and clinical care requirements in the medical treatment facilities. It reflects professional nurse guidelines and permits the Army Nurse Corps to blend military and professional nursing standards. These are important to recruitment and

retention activities. It is the professional and clinical activities that are major attractors for the Army Nurse Corps, as well as accompanying military pay and benefits.

For recruitment purposes it is important for the Army Nurse Corps to deal with a broader, more experienced professional nurse pool and to develop the experienced corps described in Chapter 6. A broader pool is crucial today when the military nurse corps are less competitive in vying for a scarce resource. Increased opportunities in the career range where professional experience is critical can have a positive effect on retention. Professional nurse plans, or career ladders as shown in the Magnet Hospital Study, address status, money, level of responsibility, and self esteem.

The new computer program developed to produce Figure 7-10 is thought to misrepresent (on the high side) the professional nurse plan in years of service 20 and beyond; adjustments are continuing.

The Navy Nurse Corps (Figure 7-11) shows a force imbalance which is directly related to factors influencing recruitment and retention discussed earlier in the chapter. The ideal professional nurse plan presented for the Navy is very tentative. A billet study is currently underway to provide facts that will be essential in establishing a plan for the Navy Nurse Corps of tomorrow.

The Air Force Nurse Corps (Figure 7-12) shows a pattern which reflects Air Force policies for inventory management. A billet study concerning grade requirements is currently underway.

Military Nurse Anesthetists - Current Status

A certified registered nurse anesthetist (CRNA) is a qualified, licensed and registered nurse who successfully completes an accredited program (24-27 months) of nurse anesthesia, successfully passes the certification examination process, continues to renew certification as required by the professional association, American Association of Nurse Anesthetists (AANA), and maintains state licensure as a registered nurse.

The certifying organization requires that the candidate for a nurse anesthesia program possess a baccalaureate degree before entry into a program. Since 1983, the number of civilian graduates of accredited nurse anesthesia programs has declined. In 1978, 819 qualified candidates took the certification examination. In 1988 the number was down to 571.[25] Over 50 schools closed in the past 6 years.

Because of their unique and highly specific preparation, nurse anesthetists are non-substitutable (that is, no other nurse specialist can "fill-in"). Preparation cannot be accomplished by on-the-job training, and shortages of military anesthesiologists preclude use of this particular group to assist in meeting nurse requirements. In 1980 the AANA established as a goal that all nurse anesthesia candidates possess a baccalaureate degree by 1985. Currently, the organization's goal is that all nurse anesthesia programs be at the graduate (masters degree) level by 1998.

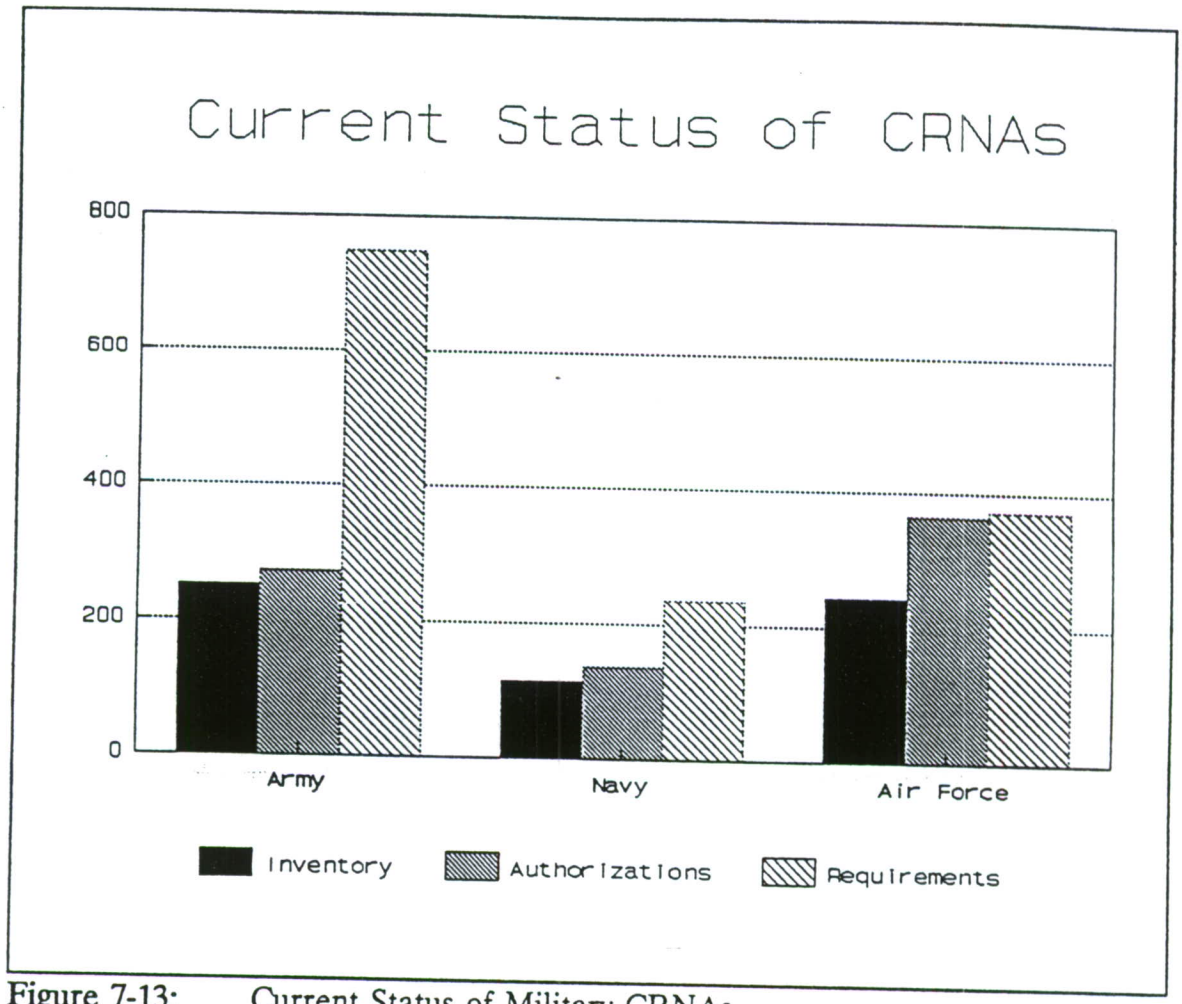


Figure 7-13: Current Status of Military CRNAs

Status of the Force

In FY 1988, nurse anesthesia status was critical in each service. The Air Force considers nurse anesthetist strength to be critical at 75 percent of authorized billets. Below this level, surgical care demands are progressively unmet due to lack of anesthesia personnel: this drives more workload to CHAMPUS. In the Navy anesthetists must be removed from shore facilities to ensure coverage aboard ship. In all Services, the percentage of available CRNA's is a serious concern.[26,27,28]

Figure 7-14 shows that the majority of nurse anesthetists are in the O3 and O4 grades; senior role models and mentors are lacking. Additionally, because so many nurse anesthetists are at the mid-level grades, the requirement for clinically experienced experts for nurse anesthetist training programs' faculty is not being met. This adversely affects accreditation of military sponsored CRNA programs since accreditation standards specify education and experience levels for CRNA program directors and faculty that are not now available to the extent required.

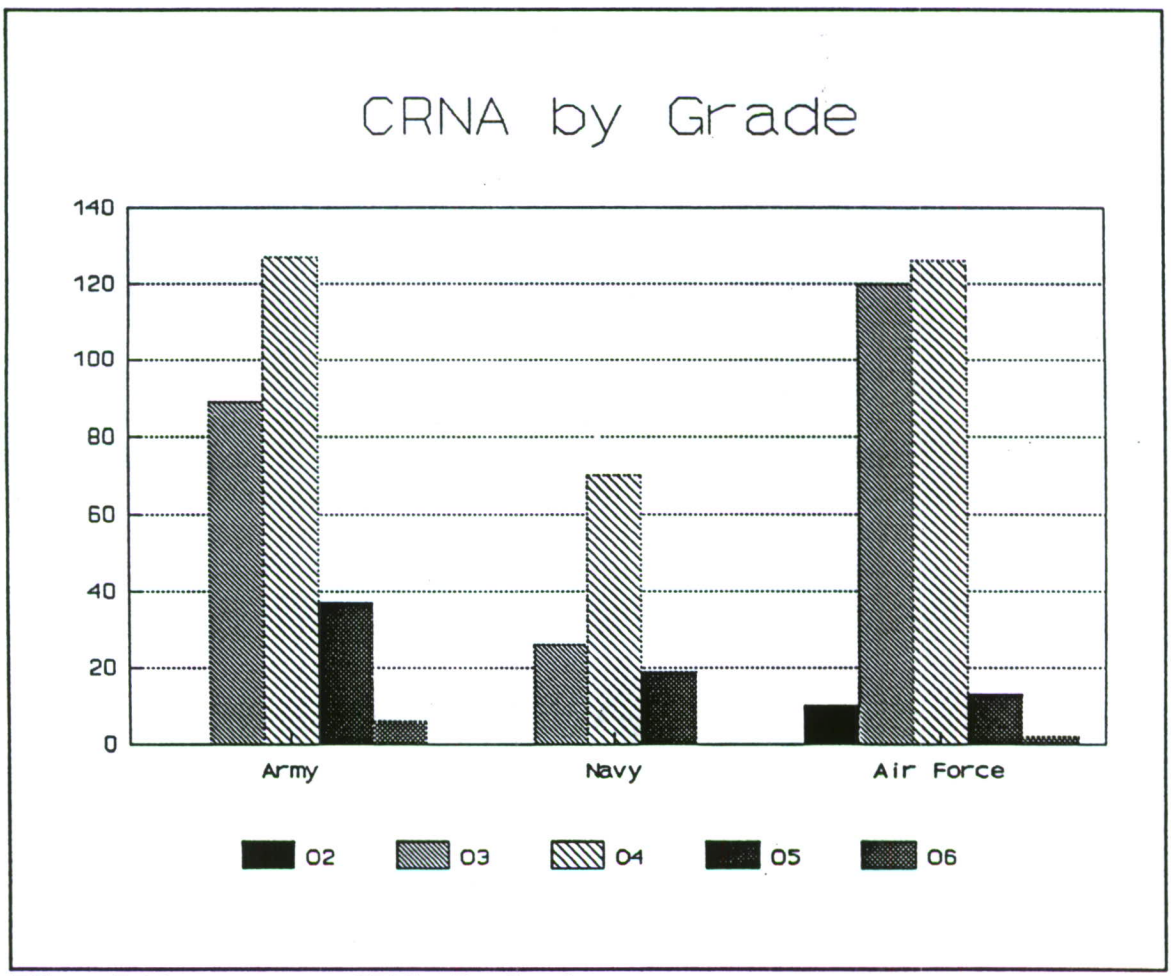


Figure 7-14: CRNA By Grade

Shortages and their Consequences

Table 7-13 shows the shortages of CRNAs. As a result of the shortages, 31 percent of medical treatment facilities in the Army have fewer CRNAs than authorized. In the Air Force, 42 percent of CONUS facilities are undermanned. For all Services, these shortages lessen capabilities to perform surgical cases and to provide full obstetrical services. This results in increased CHAMPUS costs. (The Army estimates cost at $1453 per surgical case more than the in-house (AMEDD) cost. (Source: DASG-CN).

Use of contract CRNAs in military facilities is one option which has been considered to alleviate the critical shortage. However, the morale effect on active duty CRNAs is negative, possibly of significant magnitude to further negatively affect retention. Contract individuals perform the same, or fewer duties, than active duty CRNA for much higher pay. Military nurse anesthetists have been known to resign from active duty to take employment at much higher salary, with firms assisting CHAMPUS recapture under the Partners Program at the same facility where the CRNAs had been stationed. (Army Nurse Corps 10 February 1989).

There are a small number of civilian CRNAs employed in the MHSS. Competition between civilian wages and Federal employee wage scales makes this a troublesome option. Civilian nurse anesthetists are usually employed as GS 10-11 with an annual salary of $25,000 - $36,000. In the civilian community nurse anesthetist wages are higher. See Chapter 8.

Civilians cannot be deployed so that military members fill operational assignments with greater turnover out of a smaller pool. Decreased morale and decreased job satisfaction among military anesthetists tend to follow such increase of hardship.

The medical departments have established priorities for utilization of scarce nurse anesthetists. The Army's priorities are 1) overseas assignments and mobilization units, 2) two person facilities; 3) support of training. The Navy's priorities are 1) ship board assignments, 2) overseas; and, 3) large teaching facilities. The Air Forces priorities are 1) overseas facilities, at 100 percent fill if possible and 2) all two person facilities. Additionally, any newly funded authorizations will not be filled until Air Force-wide CRNA staffing has been returned to 100 percent.

CRNA information from the nurse corps of each service is illustrated in Tables 7-2 through 7-5.

Table 7-2
Army - CRNA plan

FY	Authorized	Begin Strength	Train In	Train Out	Recruit Goal	Recruit Actual	Losses
84	282	242	24	25	--	6	19
85	268	245	20	24	--	4	22
86	275	238	30	15	--	8	13
87	280	263	28	24	--	2	33
88	293	246	31	27	2	1	32
89	399**	252	40*	35	3	--	24
90	399	275	40	35	3	--	24
91	399	294	40	35	3	--	24

** Current Projections, Plus 110 (based on planned change)

* Before Planned 12 percent Attrition.

NOTE: Data prior to 1989 is actual; numbers after 1988 are projections.

The Army reports that training capability has been utilized to capacity. The recruiting goal was changed in 1987 to bring in 15 nurse anesthetists each year, but in 1987 only two were accessed, and in 1988, only one was recruited.

Accessions save a good deal of money. The cost of training a CRNA is about $63,000. The cost of recruiting one is about $10,000.

Particular note should be taken of decreasing ability to recruit trained nurse anesthetists. The Army Nurse Corps has increased its recruiting goal to 15 CRNAs each year; it established scholarship incentives for qualified candidates, and it strengthened inservice recruiting for training in the specialty.

Table 7-3
Retention Behavior

Initial retention rates for Army Nurse Anesthetists after Completion of Their Training Obligation

FY	Rate
85	0.96
86	0.91
87	0.85
88	0.78

A survey of Army nurse anesthetists conducted in 1988 (70 percent response rate) reports that 40 percent of the captains plan to leave upon completion of obligation and only 11 percent of majors plan to stay beyond 20 years.

Table 7-4
Navy - CRNA plan

FY	Authorized	Beginning Strength	Training In	Training Out	Recruit	Losses
84	98	104	13	9	2	9
85	116	106	12	9	1	9
86	124	116	11	9	3	9
87	134	106	11	13	2	8
88	141	116	12	9	2	9
89	142	115	12	11	2	4
90	143	120	17	12	2	12
91	161	127	17	12	2	12

NOTE: Numbers after 1988 are projections, this table displays Navy Nurse Corps plan to manage CRNA community to meet mission requirements.

Retention behavior

Retention rates for Navy nurse anesthetists cannot be compared usefully because the cohorts are extremely small. (In such small cohort groups, (9-12) the loss of a single individual significantly impacts the retention rate by 10 percent and makes trend analysis unreliable.

In recent years, the Navy Nurse Corps has initiated actions to provide educational support through a stipend program during the last year of civilian training for nurse anesthetists.

Table 7-5
Air Force - CRNA plan

FY	Authorized	Beginning Strength	Training In	Training Out	Recruit Goal	Recruit Act.	Losses
84			23	16	25	30	35
85			25	25	15	11	27
86	323		20	18	20	17(1)	28
87	351	289	17	16	20	8(3)	32
88	366	282	21	17	15	7(5)	30
89		275	20	17	15	0	29
90			20	21	to present		
91			20	20			

NOTE: Numbers after 1988 are projections, data not presented is not available at this time. The numbers of actual recruits of trained CRNAs shown in parentheses is number of recalls rather than newly accessed, and are included in actual.

Summary

Authorizations for CRNAs are increasing; losses are serious; recruitment is progressively less successful; inventory is not keeping pace with demand.

The presence of military nurse anesthetists is cost effective and significantly contributes to the ability of the MHSS to conduct its missions, and to reduce CHAMPUS costs. The outlook is grave, and specific measures are indicated. Plans to address the nurse anesthetist issue are presented in Chapter 8.

Final Summary

The current inventory profile of each military nurse corps shows force imbalances and shortages. At the end of fiscal year 1988 the Army and the Navy Nurse Corps were below their budgeted end strength.

Recent recruitment of professional nurses has not met with success, either for the Army or the Navy Nurse Corps, and the Air Force Nurse Corps is experiencing increased difficulty in

accomplishing its goal. The national nursing demand and supply imbalance has caused civilian employment conditions for professional nurses to become much more competitive, particularly at the beginning salary levels. Experienced professional nurses are harder to recruit because of DOPMA regulations. A proposal addressing the recruitment issue with an accession bonus is presented in Chapter 8.

The erosive effects of the external environment, in addition to internal factors in the military and the MHSS, are just now starting to show in continuation rates and retention behavior in the nurse corps. The survey data indicates that military nurses are dissatisfied because of lack of nurses, professional factors, and compensation. Inadequate clerical and administrative support are also cited as dissatisfiers. Increasingly, these same factors are rated as dissatisfiers by military physicians. Shortages in nursing specialties are reported. Common practice is to train nurse specialists out of the general nurse corps population. Some of these shortages can be addressed by greater training effort.

Each of the nurse corps reports acute shortage in the nurse anesthetist specialty. This specialist is in great demand in the civilian community where compensation opportunities are far greater than in the military. This specialist is essential to the provision of health services and is cost effective since presence in the MHSS reduces CHAMPUS costs. Incentives to attract and retain qualified CRNAs are presented in Chapter 8.

Endnotes

1. "Nurse Data For Preparation of Congressional Report on Health Professional Special Pays," Department of Army Memorandum, 2 December 1988.

2. "Nurse Data for Preparation of Congressional Report on Health Professional Special Pays", Deaprtment of the Navy Memorandum, 30 November 1988.

3. "Nurse Data for Preparation of Congressional Report on Health Professional Special Pays", Department of the Air Force Memorandum, 16 December 1988.

4. Department of Army Memorandum, op.cit.

5. Department of the Navy Memorandum, op.cit.

6. Department of the Air Force Memorandum, op.cit.

7. Department of Defense. Health Manpower Statistics, 1987.

8. Conversation, Office of the Chief, Army Nurse Corps, February 1989.

9. Conversation, Office of the Director, Navy Nurse Corps, 1 February 1989.

10. Conversation, Office of the Chief, Air Force Nurse Corps, 1 February 1989.

11. Department of Army Memorandum, op. cit.

12. Department of the Navy Memorandum, op cit.

13. Department of the Air Force Memorandum, op. cit.

14. Department of Army Memorandum, op. cit.

15. Department of the Navy Memorandum, op. cit.

16. Department of the Air Force Memorandum, op cit.

17. Department of Army Memorandum, op cit.

18. Department of the Navy Memorandum, op cit.

19. Department of the Air Force Memorandum, op. cit.

20. Department of Defense (Office of Assistant Secretary for Health Affairs), Health Professional Special Pays Study, 1988.

21. Department of the Navy, Final Report of the Medical Blue Ribbon Panel, 21 December 1988.

22. Department of Army Memorandum, op cit.

23. Department of the Navy Memorandum, op cit.

24. Department of the Air Force Memorandum, op cit.

25. Conversation, Executive Director of the American Association of Nurse Executives, 2 February 1989.

26. Department of Army Memorandum, op cit.

27. Department of the Navy Memorandum, op cit.

28. Department of the Air Force Memorandum, op cit.

CHAPTER EIGHT

COMPENSATION ANALYSIS

The Problem

The health care profession in general and nursing in particular are both undergoing changes in working conditions and demand for services. Until recently the military has enjoyed success in recruiting and manning its nurse corps with adequate numbers of registered nurses. However, this trend is changing as the national supply of RNs is not keeping up with demand and the military is experiencing increased difficulty competing for dwindling RN assets.

Much of the military's prior success was due to military compensation (pay and benefits) which has traditionally been competitive when compared with civilian nurse salaries. However, the military compensation system may no longer be adequate in the current environment to attract and retain the required number of nurses. Table 8-1 shows that this competitive edge is rapidly being overcome by recent increases in civilian salaries.

Table 8-1
Nurse Corps
Military-Civilian Pay Differentials At Decision Points

	Year					
Decision Point	1984	1985	1986	1987	1988	1989[4]
Accession	$1,090	1,602	1,350	866	-346[1]	-1471[1]
(Starting military pay[2] at one year of service minus starting civilian RN pay[3])						
Initial Obligation	$8,147	7,701	6,384	6,600	4,972	4,444
(Military pay at 4 years of service minus average civilian staff RN pay[3])						
Six years of service	$8,502	9,241	9,210	8,196	5,880	5,189
(Military pay at seven years of service minus maximum mean civilian staff RN pay[3])						

1. Civilian RN starting pay exceeds 1988 & 1989 military O-1 RMC.
2. Military pay is calculated using DoD Regular Military Compensation tables.
3. Civilian pay is calculated using 1988 national pay data from University of Texas Medical Branch (UTMB) survey of 65 hospitals.
4. 1989 civilian pay data is estimated using a 7% increase to 1988 data.

Most notable are the changes in starting rates for new registered nurses. The national average civilian RN starting rate has surpassed Regular Military Compensation paid to new officers (O-1s) commissioned in the nurse corps. The difference can be significant in certain geographical areas where annual civilian starting salaries may exceed $30,000 per year. (Regular Military Compensation for an O-1 without dependents averaged $21,830 in 1988.)

Table 8-1 also shows a comparison of pay at two career decisions points for military RNs - end of initial obligation (three years of service), and after completing six years of commissioned service. At these decision points the relative opportunity costs of leaving, i.e., the difference between military compensation that could be expected in the following years of service (four and seven), and expected civilian salary is decreasing. Since 1983 the comparative advantage of pay for military RNs completing their initial obligation has decreased by 60 percent. The pay advantage for those RNs at the end of six years of service has decreased by 65 percent. The result is that the anticipated drop in pay after leaving the Service has become much less of a decision factor in the military nurse's decision to stay or leave.

According to a national survey of 539 hospitals and 33,280 nurses conducted by Cole Surveys and published in Modern Healthcare (December 2, 1988)[1], the pay of staff nurses rose by an average of 7 percent in 1988. Nurse managers received an average increase of 9 percent. In certain areas these increases were much higher. For example, in New England, RN manager pay rose by 13.4 percent. We expect RN salaries to continue to rise at similar rates (approximately 7 percent per year). These civilian RN salary increases compare to a two percent military raise in 1988, 4.1 percent increase in 1989 and a requested 3.6 percent increase in 1990.

The rapid rise in civilian pay can be attributed to a national shortage of RNs. This serious shortage exists despite an all-time high supply of RNs, and a record low RN unemployment rate (below 1 percent as reported by the Health and Human Services Commission on Nursing in July 1988). While the demand for RNs is increasing due to severity of patient illness, AIDS, advances in medical technology, etc., the increase in supply is not keeping pace. In fact, the total number of students in baccalaureate nursing schools has continued to decline.

Civilian hospitals have been affected first. The vast majority of hospitals (76 percent), report some degree of shortage and RN vacancy rates across the country have increased. The practice of using agency nurses versus permanent staff has risen, and the number of hospitals forced to close beds due to personnel shortages has increased.

This acute nurse shortage has now spread to the military: total inventory of RNs is below billets authorized; the RN force structure as defined by experience and specialty qualifications is no longer adequate to meet needs; the Services are either unable or barely able to meet recruiting goals; retention rates at the end of initial obligation are declining; nurses are forced to routinely work extended hours; and medical treatment facilities are underutilized because of a shortage of qualified nursing staff.

Analysis of Registered Nurse Compensation

To analyze registered nurse pay we used DoD Regular Military Compensation (RMC) tables; federal employee (GS) and Veterans Administration pay schedules; and civilian nurse compensation data compiled by the University of Texas Medical Branch (UTMB) at Galveston (National Survey of Hospital and Medical School Salaries)[2], and data from the 1988 Cole Nurse Compensation Survey.

Although pay data are abundant, it is difficult to make accurate comparisons between military and civilian nurse compensation. Unlike the military, there are no equivalent civilian data that report RN salaries by years of service/experience and pay grade. Rather, civilian data are reported as either an average salary by position held, or a salary range by position (i.e., minimum and maximum pay for staff or head nurse). Additionally, comparison with federal employee RN pay is difficult since the standard grade structure for government nurses employed in military hospitals is applied with great variation depending on specific position, duties and responsibilities.

Our analysis compared the pay for entry level, experienced staff nurse, charge nurse and head nurse positions. For military we categorized O-1 as an entry-level position; O-2 with over two years as an experienced staff nurse; O-3 with approximately six to nine years of experience as a charge nurse; and O-4 as a head nurse with ten years experience. Annual Regular Military Compensation (RMC) was used for military nurses' salaries. RMC includes the sum of basic pay, basic allowance for subsistence (BAS), basic quarters allowance (BAQ), variable housing allowance (VHA), and a federal income tax advantage. RMC pay components (BAS, VHA, etc.), are averaged for all personnel in specified pay grades for Fiscal Year 1988.

For civilian RNs the national minimum average staff nurse starting rate reported in July 1988 by UTMB was used as the entry-level income. The reported average staff nurse salary was used for the experienced RN position. Maximum average staff nurse salary was used for charge nurses and maximum head nurse salary for civilian head nurses.

For 1988 federal employee RN salaries we used GS-7 as the starting (entry-level) salary for a four year graduate with a bachelor of science degree in nursing (BSN); GS-9 step four as an experienced staff nurse; GS-11 step four as a charge nurse; and GS-12 step four as a head nurse. For Veterans Administration nurses we used starting pay for Associate Grade for entry level; average Full Grade for staff nurse; Intermediate Level for charge nurse; and Senior Grade for head nurse.

Table 8-2 and Figure 8-1 on page 8-4 show the results of this comparison.

Table 8-2
Registered Nurse Pay by Position & Employer

	Mil	Civil	Fed Emp	VA
Entry Staff	O-1 **$21,830**	Start $22,176	GS-7 $18,726	Associate 19,712
Exp Staff	O-2 $31,211	Avg Staff $27,168	GS-9 $25,198	Full $26,341
Charge	O-3 $38,835	Max Staff $32,160	GS-11 $30,488	Intermed $31,873
Head	O-4 $48,303	Head $39,084	GS-12 $37,231	Senior $38,203

Table 8-2 above and Figure 8-1 below show that except for starting salaries, military RNs still enjoy a pay advantage over their civilian counterparts. **Civilian pay data, however, do not include overtime, shift differential, or weekend differential. While salaries of civilian nurses can be significantly augmented by these extra pays, military nurses do not receive additional pay for extra hours worked. In fact, considering that most military nurses work more than 40 hours a week, (Service-wide average is estimated to be 50 hours), their pay rate is significantly reduced when normalized for a standard 40 hour work week.**

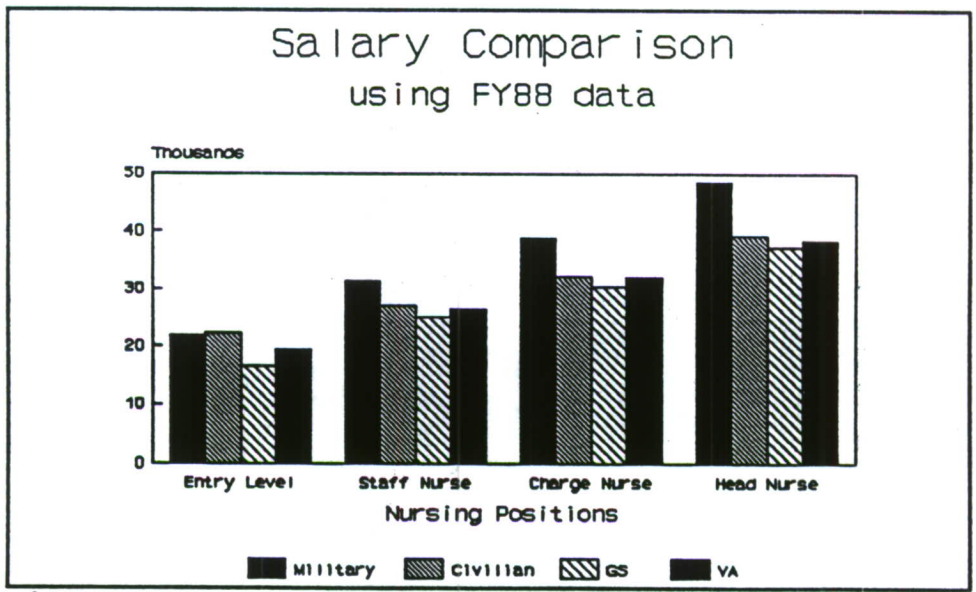


Figure 8-1: Registered Nurse Pay by Position and Employer

Another factor not inherent in civilian nurse pay statistics is the ability of civilian RNs to work part time and/or for agencies. In this shortage environment, temporary or agency registered nurses are often able to command salaries in excess of $20 per hour ($40,000 per year) and consistently work 40 hours per week. The agency demand for nurses is also fueling explosive salary increases in many areas. Rates for critical care nurses in December 1988 reached $39 per hour in San Francisco and $34 an hour in Boston. Hospitals in these areas are forced to counter agency rate increases with their own. For example, Massachusetts General Hospital has instituted a $9.25 an hour differential for weekend work at night - adding a $333 premium above base pay for three 12-hour shifts.

Table 8-2 and Figure 8-1 compare national averages. Nursing salaries, however, vary greatly throughout the country. Salaries are normally higher in large urban areas in the Northeast and certain areas on the West Coast. These are also the areas with concentrations of nursing schools, and thus the areas where the military must compete for new RN graduates.

Figures 8-2 and 8-3 show 1988 national average regional differences reported by UTMB in beginning staff and experienced staff nurse salaries (surveyed maximum mean staff nurse salaries). Table 8-3 shows actual 1988 salary ranges for staff nurses in large metropolitan areas reported in the American Journal of Nursing (January 1989)[3].

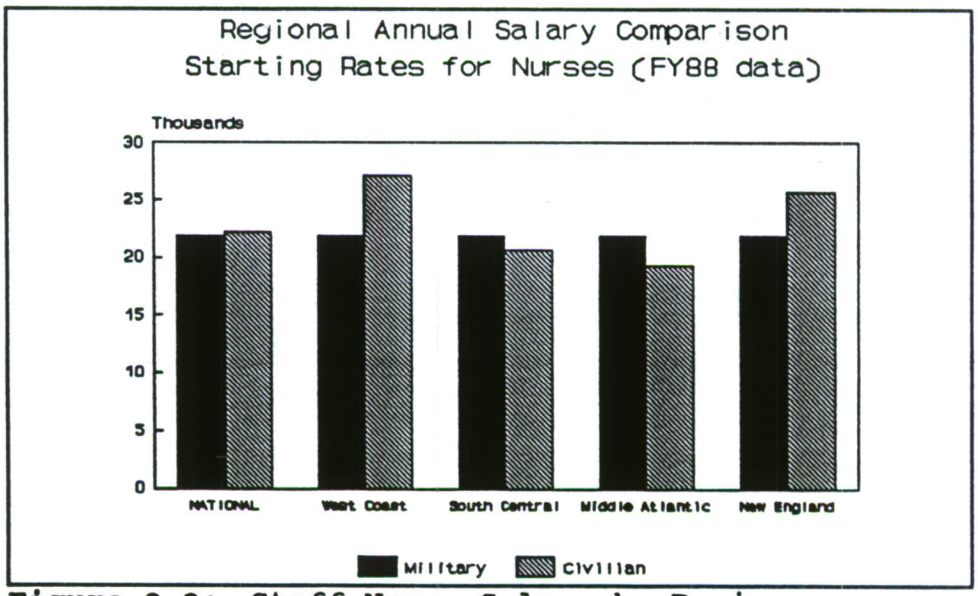


Figure 8-2: Staff Nurse Salary by Region

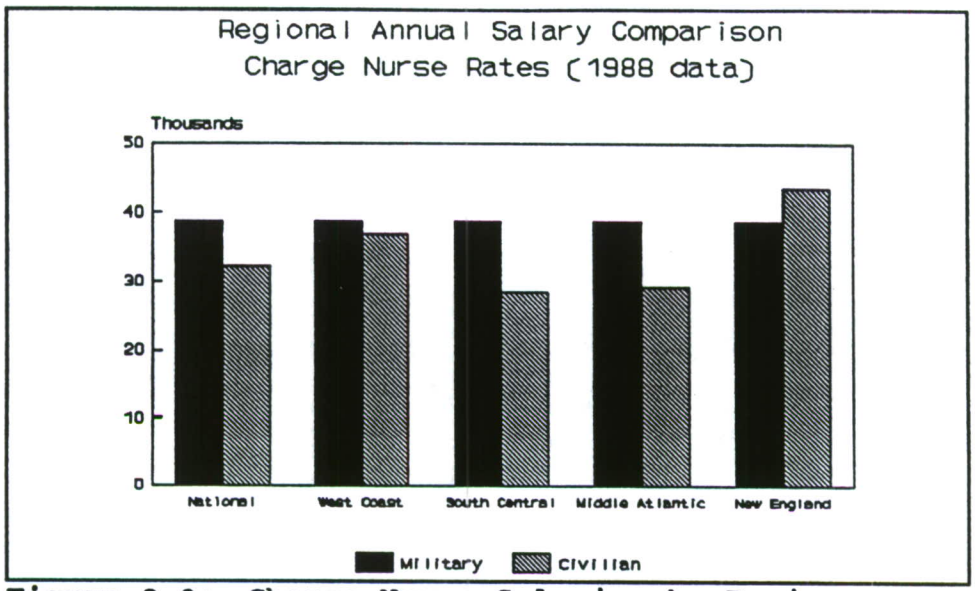


Figure 8-3: Charge Nurse Salaries by Region

Table 8-3
Metropolitan Staff Nurse Salary Ranges

City	Start Rates	Top Rates
Boston	$22,797 - 31,013	$31,200 - 51,709
New York	$26,000 - 30,500	$29,000 - 43,465
Wash, D.C.	$20,633 - 27,643	$22,921 - 48,669
Atlanta	$20,280 - 24,960	$28,392 - 37,107
Chicago	$21,798 - 26,104	$23,025 - 42,640
Denver	$22,464 - 28,704	$26,083 - 37,398
Seattle	$19,968 - 23,400	$34,860 - 40,000
San Francisco	$30,700 - 34,817	$35,880 - 41,849

When considering regional pay data rather than national averages, it is obvious that military RN compensation has been surpassed by civilian pay in many areas. The opportunity now exists for many military nurses to leave the Service and match or exceed their current military pay. We expect this to have significant impact on the accession and retention of officers in the nurse corps.

Nurse Specialists (Nurse Anesthetists)

Retention of nurse corps specialists, especially certified registered nurse anesthetists (CRNAs), is an area of major concern for the Services. Since these specialists are readily employable in the private sector, competitive compensation is necessary to prevent their loss.

Table 8-4 shows current and projected pay data for military and civilian CRNAs using data from UTMB (July 1988) and the American Association of Nurse Anesthetists (AANA), and RMC for military CRNAs.

Table 8-4
Comparison of Military-Civilian CRNA Pay

	1986	1987	1988	1989
Military[1]	$44,017	$44,211	$44,575	$46,367
AANA[2]	$45,800	$52,700	$57,860[4]	$63,650[4]
UTMB[3]	$41,900	$44,400	$49,100	$54,010[4]

1. Military is average RMC for a modal nurse anesthetists, O-4 with 10 years of service.
2. AANA data are the mean reported salaries of AANA members in 1986 and 1987 and are representative of CRNA salaries in all modes of practice.
3. UTMB data are the mean maximum CRNA salaries reported in surveyed hospitals.
4. These are estimated annual salaries using a 10% annual increase.

As shown in Table 8-4, average civilian CRNA pay has surpassed military average nurse anesthetists' pay. The rate of increase for civilians is also significantly higher; a 13 percent increase from 1986 to 1987 (reported by AANA), and a 10 percent increase from 1987 to 1988 (UTMB). These compare to a three percent increase in military RMC in 1987 and two percent in 1988.

Pay for on-call duty, overtime pay and pay for working on weekends is not included in Table 8-4. These extra pays can be a substantial supplement to civilian CRNAs total income. (It is not uncommon for CRNAs to receive $250 a day for weekend call pay.)

A literature search of medical and nursing journals provides numerous examples of the many job opportunities and excellent salary and benefit packages currently being offered to experienced nurse anesthetists. (See Appendix B).

Clearly military compensation for certified registered nurse anesthetists no longer provides a competitive edge in attracting or retaining these highly trained specialists. The Services have experienced a 15 percent shortfall of CRNAs for the last three years. CRNA inventory in all Services is below requirements and neither direct accessions nor training pipelines have been able to meet Department requirements. The military compensation system provides no authorized method for providing the needed additional economic incentives that will attract and retain experienced CRNAs.

Benefits

Recent increases in civilian nursing salary do not accurately reflect all that is happening in civilian compensation. As a counter to the RN shortage, civilian institutions initially increased benefits and improved working conditions before making significant changes to salary structures. Examples include: increased scheduling flexibility; weekend alternative programs where a nurse receives credit for 36 or 40 hours while working 24 hours during a weekend; reimbursement for education; and subsidized child care and housing.

Conversely, military benefits for nurses have remained static, and although military benefits are still often generous by civilian standards, their previous competitive advantage is swiftly eroding. (An exception is military retirement, which although was recently changed, remains very competitive and continues to have a positive effect on the retention of all military personnel, especially those with over 10 years of service.)

A Market Analysis of the Military Nurse Shortage

Recent increases in the demand for nursing services in the United States have driven salaries up. Private-sector employers can respond fairly rapidly to changes in the market by adjusting compensation. The military, on the other hand, cannot act as quickly.

Figure 8-4 represents the market for nurses in the United States. The market is initially at equilibrium with a price of P and a quantity of Q--at that price, the number of nurses willing to work exactly equals the number that employers want to hire.

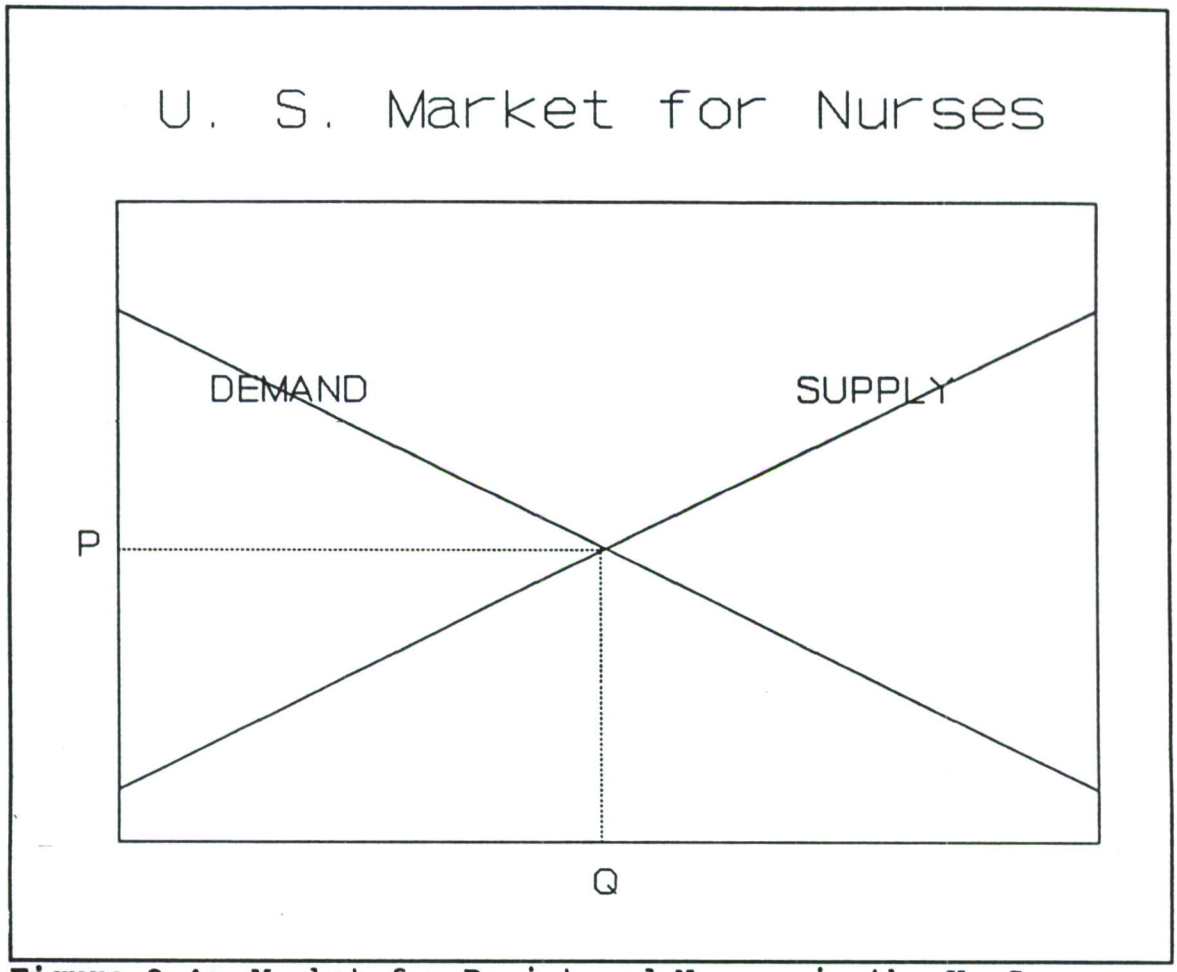


Figure 8-4: Market for Registered Nurses in the U. S.

If we assume that the military is one employer in this market, it is at equilibrium initially as well. Empirical observation has shown that military nurses receive higher pay than the average private-sector nurse. The difference in pay can be seen as a **compensating differential** (i.e., an offsetting pay that compensates for unpleasant aspects of military service). Figure 8-5 shows the effect of compensating differentials in the market for military nurses.

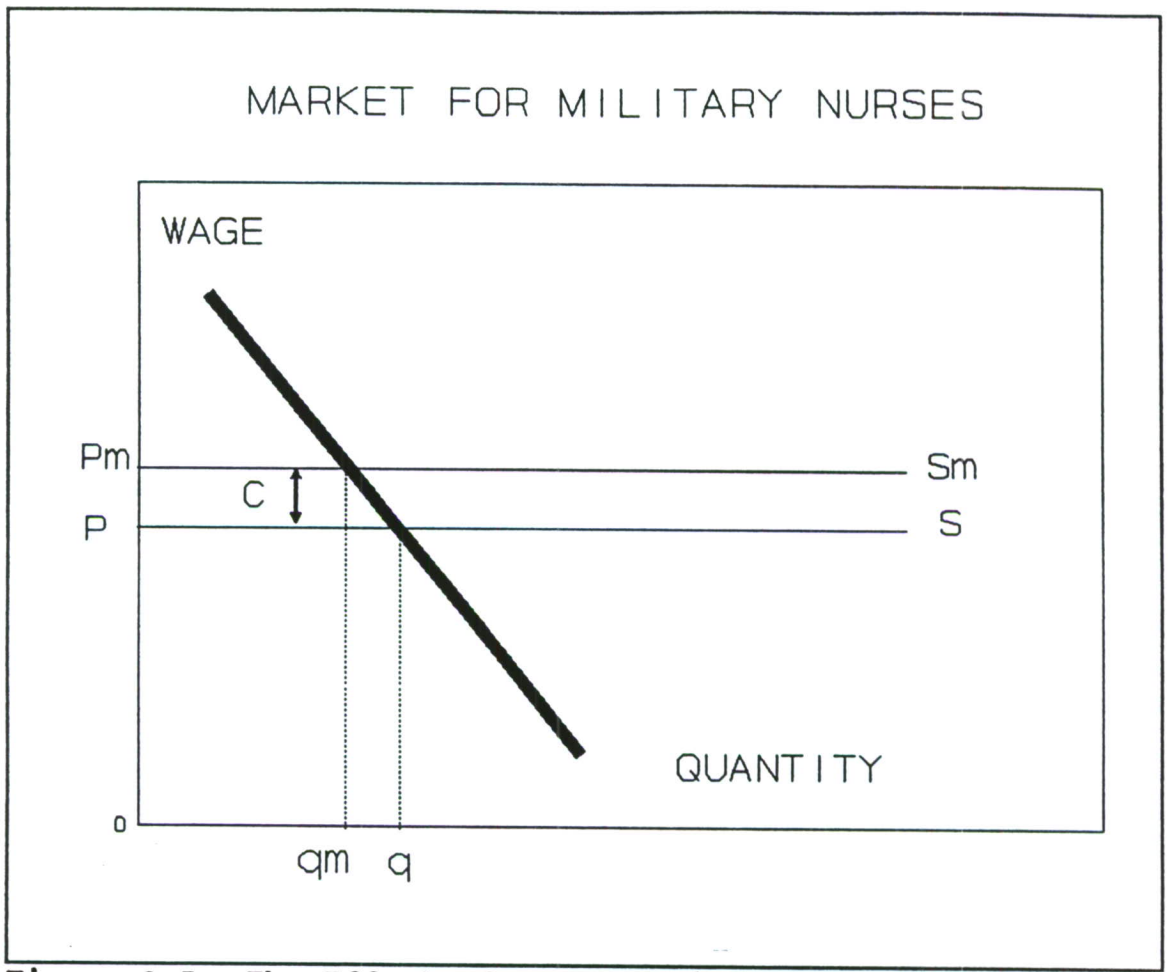


Figure 8-5: The Effect of Compensating Differentials in the Market for Military Nurses

If nursing in the military were indistinguishable from private-sector employment, equilibrium would still occur at price P and quantity q (the amount of nurses employed by the military). Since the military is a price-taker in this market, the supply of nurses (S) is represented by a horizontal line (the military cannot employ any nurses at anything but the market wage).

Military service is different, however. The analysis is over-simplified if we treat the market for military nurses the same way as the private-sector nurses. Military nurses are faced with the conditions associated with military life, such as uncompensated overtime, deployments, family separation, frequent moves, and possibility of danger. The military must pay a premium to offset the negative aspects of military service. If the amount that just compensates a nurse for these negative job aspects equals C, then the equilibrium price for military nurses equals P_m, where

$$P_m = P + C.$$

The military's supply curve becomes S_m, and the quantity of nurses employed equals q_m.

What happens when the demand for nurses increases? Figure 8-6 shows the market for nurses in the U.S., just like Figure 8-4. The demand curve has shifted to D' because of increased levels of acuity, required skill levels, etc. The number of nurses willing to work at wage P remains at Q, but the number of nurses that employers want increases to Q". Increased competition for nurses will bid up the price until the quantity demanded equals the quantity supplied. In this case, the equilibrium price is P', and the equilibrium quantity is Q'.

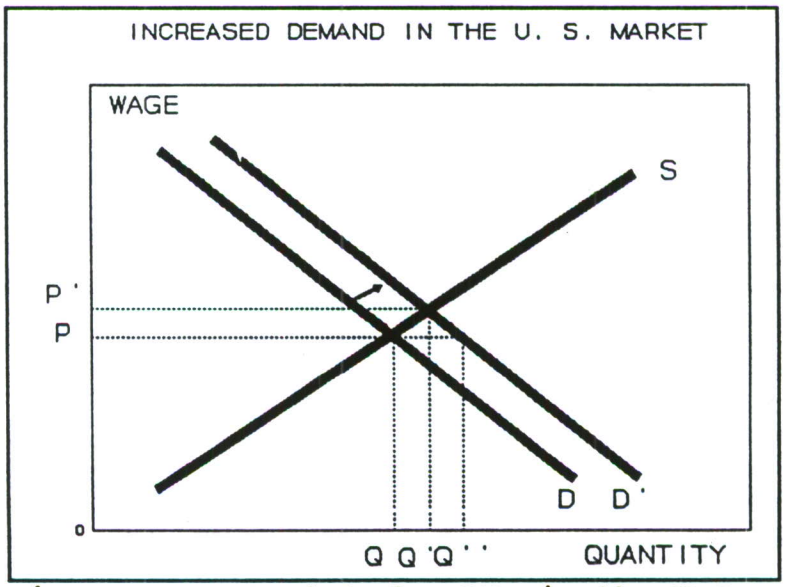


Figure 8-6: Market for RNs in the U.S.

The changes in the market obviously affect the market for military nurses as well. For simplicity's sake, assume that the market wage has increased by an amount equal to the military's compensating differential (C). Therefore,

$$P' = P_m.$$

Figure 8-7 shows that the supply curve facing the military has shifted up. Although the market price equals P'(the wage the military was already paying), we must still tack on the compensating differential (C). The equilibrium price for military nurses now equals P'_m, where

$$P'_m = P' + C.$$

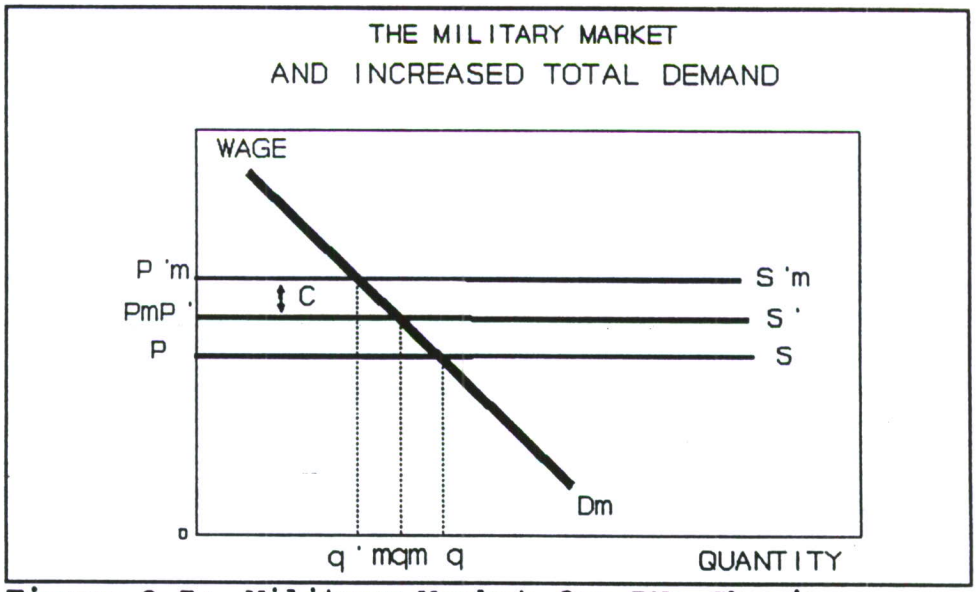


Figure 8-7: Military Market for RNs Showing Increased Demand

As a response to market demand, we are witnessing a rapid rise in civilian RN salaries, especially in large metropolitan areas. An increased use of agency nurses also belies the change in demand. Because nurses enter and exit the market quickly through agencies, their wages are highly responsive to changes in market conditions. Increases in military RN pay, however, cannot respond in the same manner; RN pay is tied to changes in Regular Military Compensation which must be budgeted within the Department and legislated by the Congress. This places the military at a disadvantage compared to private sector institutions when competing for RN assets.

Conclusion

With the exception of staff RN starting pay and pay for certified registered nurse anesthetists, direct compensation (RMC) for military registered nurses was higher in 1988 than the national average salaries of their civilian contemporaries. However, regional civilian RN pay is higher than military pay in many areas. Also the civilian rate of increase of nursing salaries is currently higher than the military. The result is that the comparative advantage of military compensation is rapidly decreasing - particularly when considering actual working hours and the dual role of military nurses.

Data from studies completed over the last five years suggest a major change has occurred in the way military nurses view their compensation. A 1984 Army study reported that the majority of Army nurses were satisfied with their pay. However, over 70 percent agreed that some form of special nurse pay was warranted. The 1985 DoD survey showed the majority of military nurse respondents remained satisfied with family income but they also expressed concern that military pay and benefits would not keep up with inflation and anticipated erosion of retirement benefits. Responses of the 3,310 military nurses who participated in the 1988 Health Professionals Special Pay Study Survey indicate that now over half of all nurses are not satisfied with their total pay and benefits package. Over 75 percent of respondents indicated that they did not think the present compensation system was adequate to attract new nurses, and 79 percent indicated that it was not effective retaining people. Respondents stated that they would need between $9,000 and $16,000 a year additional pay to remain in Service under current conditions. Between $1,000 and $4,000 less was needed if conditions became adequate. These survey results show that as with military physicians, pay is becoming a major dissatisfier to a substantial number of military nurses.

The Solution

Historically, personnel shortages have become critical before the system reacts. For example, in 1980 large pay raises and major modifications to special pays were required to improve the poor retention and experience shortfall that was allowed to develop in the military personnel force in the late 1970s. To preclude this situation from recurring for military nurses, we need to act now before the shortage further deteriorates and military health care becomes inadequate.

Short Term

Recruiting

The Department of Defense needs the authority to offer monetary incentives to new baccalaureate prepared graduates and experienced RNs to enter military service. As discussed earlier the pool of available RN assets is not keeping up with the demand and the previous military pay advantage has decreased. The inadequate number of nursing students and the increasing number of nurses leaving hospital-based nursing are

intensifying the competition of the Services to recruit and retain nurses. Accordingly, the Services are experiencing difficulty meeting their recruiting goals.

To improve DoD's competitiveness, we are proposing two compensation programs for 1990; **(1) FY 1990 Nursing Accession Bonus Demonstration, and (2) Incentive Special Pay for Certified Registered Nurse Anesthetists.**

o **FY 1990 Nurse Accession Bonus Demonstration Program**

The Nurse Accession Bonus (NAB) would be a one time payment that would be used to attract nurses to enter military service. The NAB can be targeted at both recent graduates and experienced RNs. The actual amount paid will depend on the needs of the Services. DoD intends to pay a maximum accession bonus of $5,000 for Fiscal Year 1990. Nurses would be required to agree to remain on active duty for a period of four years and would receive a lump sum payment upon commissioning. (Legislative proposals and cost data are in Appendices C and D.)

o **Incentive Special Pay Plan for Certified Registered Nurse Anesthetists**

Certified Registered Nurse Anesthetists are critical to both the peacetime and wartime military medical missions. The Services are having increasing difficultly attracting and retaining these specialists. As we have shown, average civilian CRNA pay has not only surpassed military pay, but is also increasing at a faster rate. We need a monetary incentive program to retain experienced CRNAs and to entice our nurses to enter this specialty. Accordingly, we propose an Incentive Special Pay (ISP) that may be paid to CRNAs or to nurses in other critically short specialties regardless of their obligation status. To be eligible, nurses must agree to remain on active duty for at least one year. The Service Secretary concerned will have approval authority for all contracts, with annual bonus amount not to exceed $6,000. Obligation incurred due to ISP contracts will be added to any existing service obligation incurred due to training. (Legislative proposals and cost data are in Appendices C and D.)

Long Term

Nurse Corps 1990 pay programs will prove instrumental in attracting nurses into the military and retaining Certified Registered Nurse Anesthetists. They will also send a positive signal to military health care professionals that the Department and the Congress are committed to improving conditions and providing pay competitive with the civilian sector. However, the rapidly changing nursing environment dictates that we continue to look for innovative ways to maintain the attractiveness of a military career.

Endnotes

1. Ben S. Cole, "Nurse Compensation", Modern Health Care, December 2, 1988, page 24.

2. University of Texas Medical Branch at Galveston, UTMB 1988 National Survey of Hospital and Medical School Salaries, (Galveston: UTMB, July 1988).

3. "Salary Update", American Journal of Nursing, January 1989, page 16.

APPENDIX A

APPENDIX A

What Is Nursing?

In the mid 1800's, Florence Nightingale described nursing as putting the patient "in the best condition for nature to act on him".[1] Nurses provided comfort to the sick and the dying; there was no hope of cure for disease. Nursing focused on providing a clean, fresh, and restful environment to promote an individual's recovery. Nursing changed as disease-specific cures were developed. Nurses became involved in administering the medical treatment plan in the hospital and preventing disease in the home and community.

Today, nursing has expanded beyond a disease-orientation. It is concerned with helping individuals to achieve their highest potential for health. Virginia Henderson describes the function of the nurse: " to assist the individual, sick or well, in those activities contributing to health or its recovery (or peaceful death) that he would perform unaided if he had the necessary strength, will, or knowledge, and to do this in such a way as to help him gain independence as rapidly as possible".[2]

What Nurses Do... and Where

Nursing is involved with the promotion and maintenance of health, prevention of illness, care of persons during acute phases of illness, and rehabilitation and restoration of health.[3] Thus, nursing is practiced within a variety of settings, by nurses with diverse specialties and job titles. The common thread throughout nursing is its focus on the needs of individuals, families, and the community during health and illness.

Although the majority of employed nurses work in the hospital, the opportunities for nurses to work outside the hospital are growing rapidly. Today, nurses work in almost every place where health care is provided, from the home, to the hospital, the hospice, to the Hill (Capitol Hill). See Table A-1.

How Nurses Do Nursing

Nurses provide care to patients directly and indirectly. Direct nursing care includes such activities as providing for the patient's mental, emotional, and physical needs; assessing patients' needs; planning, implementing, and modifying nursing activities

to meet patients' needs; monitoring, recording, and responding to changes in patients' status; administering and monitoring diagnostic and therapeutic procedures prescribed by the physician; teaching and counseling patients and family about health needs; working with the health care team in the delivery of planned health care; and serving as patients' advocate.

Indirect nursing care is not immediate to patient care, but impacts on the quality of the care delivered. Head nurses and nurses at middle and top management levels organize and coordinate all the nursing activities affecting the care of patients within their span of control. Nurse educators conduct staff development and continuing education for nurses and nursing staff and teach in basic nursing programs. Nurse researchers find solutions to clinical practice problems. Other positions not directly related to patient care include consultants, editors, writers, patient care educators, executive directors of professional organizations and state boards, lobbyists, health planners, utilization review coordinators, nurse epidemiologists, and legislators.[4]

Is Nursing Different in the Military Health Service System?

Military nurse staffing of the DOD medical treatment facilities is supplemented by federally-employed civilian nurses and contract nurses. Contract nurses refer to those nurses working for privately-owned agencies who are employed by the services to meet staffing vacancies. They are hired to provide direct patient care. Many medical treatment facilities are using contract nurses to varying degrees to offset the shortage of military and civilian federally-employed nurses in military hospitals.

The higher salaries and fewer responsibilities of contract nurses working in military medical treatment facilities makes it difficult to recruit and retain federally-employed civilian nurses and military nurses, as well as creating tension and dissatisfaction within the working environment.

In addition to the shortage of military and federally-employed civilian nurses, another change affecting the demands for nursing care within the military health service system is the change in the patient population. Patients tend to be older, sicker, and require more nursing care during their hospital stay. These changes, coupled with the reported decrease in the average length of stay for patients within many medical treatment facilities, exacerbate an already critical situation in which the nursing care requirements exceed the supply of nurses.

The high turnover of enlisted nursing personnel and shortages of personnel in administrative and clinical support services increase the demand for nursing services. Nurses are often expected to substitute for paraprofessional nursing staff, ward clerks, medical record technicians, and patient transport as well as to assume many duties of laboratory, pharmacy, physical and respiratory therapy personnel during other than "normal" duty hours. "This substitution dilutes the quality and quantity of professional nursing care time for patients and negatively influences the ability to staff units

appropriately based on professional assessment of patient acuity and nursing care requirements".[5]

Although there is little direct automated support for nursing functions today, the DoD is currently testing the Composite Health Care System (CHCS) which will be installed in military hospitals and clinics worldwide, and which will provide a variety of nursing support functions. Automation has been shown to provide for more efficiency in the management of nursing services, since administrative and clerical tasks are reduced. Though automation may not reduce the overall requirements for nursing personnel, the reduction of administrative workload allows more time to be devoted to enhancing the quality of direct patient care.

"The addition of new health services, such as AIDS screening, health promotion, infection control, drug and alcohol screening, quality assurance programs, utilization review programs, peer review programs, occurrence screening, incident reporting requirements, bone marrow transplant services, mobile community health services, and increasingly complex levels of premature and neonatal care have placed further demands on military nursing services".[6] Any increases in nursing personnel have to accommodate both ongoing programs with increased intensity of care and newly developed health services.

Advances in scientific technology have revolutionized the science of modern warfare. The arsenal of military equipment, weaponry, and combat systems have been modernized in preparation for tomorrow's battlefield. Since new developments in warfare affect the nature of combat casualties, continual peacetime training is required for military nurses in preparation for their mission to provide nursing care in wartime.

TABLE A-1

WHERE NURSES WORK OUTSIDE THE HOSPITAL

Ambulatory care centers
Health maintenance organizations
Preferred provider organizations
Home health care agencies
Community health clinics
Public health departments/social service agencies
Long-term care facilities (nursing homes, extended care facilities, and hospices)
Day care centers for the elderly or those with special needs
Industry and business
Individual practice associations
Birthing centers
Hospices
Prisons and correctional facilities
Crisis centers
Public schools, colleges, universities
Institutions, such as schools for the mentally and physically handicapped
Specialized agencies, such as Planned Parenthood, Cancer Society
Self-help groups, such as Alcoholic Anonymous, Weight Watchers
Shelters for the homeless
Homes for abused women and children, handicapped, AIDS
Physician's offices
Private duty in the home
Private practice with physician or non-physician health professional
Rehabilitation centers
Professional nursing organizations
State boards of nursing
Legislative and governmental committees
Pharmaceutical and medical supply companies
Lobbying groups
Publishing companies
Health planning commissions
Insurance companies
Self-employed; entrepreneur
Peer review organizations
Government agencies at the local, state, and federal levels, such as Center for Disease Control, National Institutes of Health
Consulting firms

Endnotes

1. Florence Nightingale, Notes on Nursing: What It Is and What It Is Not, (New York: Dover Publications, 1860/1969).

2. Virginia Henderson, The Nature of Nursing: A Definition and Its Implications for Practice, Research, and Education, (New York: Macmillan Company, 1966), p. 3.

3. Claire Fagin, "Primary Care as an Academic Discipline", Nursing Outlook, 26: (December 1978): 753.

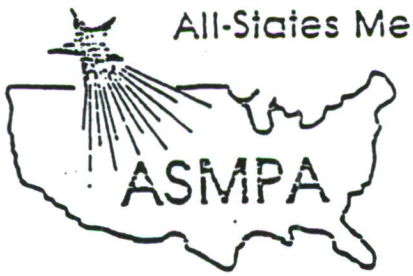
4. Lucie Young Kelly, Dimensions of Professional Nursing, 4th Ed., (New York: Macmillan Publishing Co., 1981).

5. U.S. Department of Health and Human Services, Secretary's Commission on Nursing, Support Studies & Background Information, Vol II, (Washington, DC:December 1988), p. VI-A-9.

6. Ibid. p. VI-A-13.

APPENDIX B

Certified Registered Nurse Anesthetists Advertisements



All-States Medical Placement Agency

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Making Bright Futures Possible

FREE LANCE CRNA'S WANTED . . .

If you can answer yes to 3 of the 4 questions below - you should be a free lance CRNA with All States Medical Placement Agency!

Yes No

- ☐ ☐ Do you want to make an annual income of $ 50 - $ 100,000? (part or full time)
- ☐ ☐ Do you want to see the U.S. at no expense? (travel, lodging and meals are paid)
- ☐ ☐ Do you want the challenge of being your own boss? (work as many weeks as you want)
- ☐ ☐ Do you want to broaden your horizons? (new people, ideas, places)

If free lance anesthesia sounds exciting to you - we are your agency. We can be as near as the phone no matter where you are.

CRNA'S Represeniing CRNA'S

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Minneapolis School of Anesthesia '59;

Norma Denney CRNA

Northwestern Hospital School of Anesthesia '60.

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...I. CHEARS, M.D.
...M. DEAN, M.D.
...LD HARGER, M.D.

JOHN A. MALLORY, M.D.
FAY M. SLOAN, M.D.
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Director of School Of Anesthesia:

Arkansas Anesthesia, P. A. has currently hired CRNAs, but we are still looking to hire other CRNAs or Board Eligible graduates to join our staff of Anesthesiologists and 29 CRNAs.

We offer all surgical sub-specialities including open heart. Our group offers an opportunity for skill advancement in a supportive, friendly, working atmosphere.

Baptist Medical Center is a 750 bed acute care facility with 17 operating rooms in the main O.R.

We are located in Central Arkansas and about 2 hours east of Memphis, TN. Little Rock, Arkansas is a progressive city with a population of approximately 150,000. There are several colleges and a major University located near by.

The Little Rock area also has many beautiful lakes and mountains which offer a varity of activities such as hunting, fishing, camping, water-skiing, and etc.

We offer a very attractive salary and comprehensive paid benefit package. Some of our benefits include:

MALPRACTICE INSURANCE PAID
SHORT AND LONG TERM DISABILITY
HEALTH INSURANCE WITH MAJOR MEDICAL & DENTAL
MEDICAL REIMBURSEMENT
SUBSTANTIAL YEAR END BONUS
RETIREMENT PLAN - FULLY VESTED AFTER 6 MONTES
AT A GUARANTEED 15% OF GROSS SALARY.
4 WEEKS PAID VACATION - WILL INCREASE AFTER 2 YEARS
6 PAID HOLIDAYS
5 DAYS OF PAID PROFESSIONAL LEAVE
MOVING EXPENSE
PAID WEEKEND CALL - $350.00/24 HOURS
UNUSED VACATION & SICK TIME MAY BE REIMBURSED
NO ROTATING SHIFTS
CALL EVERY 24TH DAY
OVERTIME - TIME & HALF
SALARY WITH BENEFITS $50,000 PLUS

SINCERELY,

Stanley K. Browning, M. D.
Director of Anesthesia

Mary Shenker, CRNA
Chief CRNA

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ADERHOLD, M.D.
ANTONY, M.D.
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MYERS, M.D.
COURTNEY, M.D.
C. FIRMIN, M.D.

September 6, 1988

Dear CRNA,

Alexandria Anesthesia Service is a group of nine anesthesiologists who have furnished anesthesia for all surgery at the two local private hospitals for over 30 years. Serving as the primary medical center for Central Louisiana, St. Frances Cabrini and Rapides General Hospitals provide health care for almost 150,000 people. At the present time the group employs fourteen nurse anesthetists with two remaining positions available. Your name has been furnished by the American Association of Nurse Anesthetists as a candidate for one of these openings. A description of the employment requirements and opportunities, as well as an overview of the city in which you would relocate, are provided through this correspondence.

- Base salary of $48,500 - $50,000 contingent on experience
- $51,000 base salary for a CRNA with experience in all types of anesthesia including open heart surgery
- "Call" every eight days with paid next day off
- No in house or OB call
- No pediatric open heart surgery
- Four weeks paid vacation and excellent bonuses
- Retirement plan, major medical health insurance, and life insurance all paid by the group
- Funds available for standard relocation expenses

Located in the beautiful piney woods of Central Louisiana, Alexandria is the major metropolitan area with a population of approximately 80,000 people. The many nearby lakes and rivers provide opportunities for duck hunting, fresh water fishing, boating, and water skiing. Salt water fishing along Louisiana's Gulf Coast adds to the recreational appeal of the city. Two country clubs are available for golfing, tennis, and swimming, as well as other social activities. The educational needs of Alexandria's children are met through excellent public, private, and parochial schools. The city also offers advanced educational programs at Louisiana State University and Louisiana College. Churches of all denominations are found throughout the Alexandria area.

For your convenience a response card is enclosed to obtain further information concerning a career with Alexandria Anesthesia Service, a progressive group of medical professionals.

Watch for our booth if you are attending the Texas Association of Nurse Anesthetists Fall Institute September 22-25, 1988 in Houston, Texas.

Sincerely,

Vera Blakemore

Vera Blakemore
Office Manager

#1177 Upstate New York
Large group, 7 - 3:30, no call, excellent educational & cultural opportunities.

#1126 Southern New Jersey
CRNAs, 3 MDAs, 170 beds, near NYC, Philadelphia, DC, 3 weeks vacation, 1 week CME.

#1247 Ohio
4 MDAs, 4 weeks paid vacation pension, profit sharing, very stable group.

#1272 Philadelphia
250-bed hospital needs chief CRNA, salary + call + benefits, expanding CRNA department.

#1189 100 miles from DC
240-bed hospital, staff position, 4 weeks vacation, hospital employed.

Call toll free 1-800-426-7901

MID CENTRAL

#1255 Missouri
150-bed hospital, community of 20,000, call 1 in 5, paid interview and relocation.

#1276 Kansas City
Large group at teaching hospital, stable professional environment, competitive income, profit sharing & pension.

#1165 Nebraska
Staff large hospital, paid everything, hospital very CME oriented, signing bonus ($5,000).

#1243 Illinois
Join 6 CRNAs, 2 MDAs, salary + $100/call, corporate pension and profit sharing plan.

#1235 Indiana
2 CRNAs, 1 MDA, work 20-25 hours per week, KEOGH plan.

#1227 Chicago area
Large group, 8 hours/day, M - F, substantial corporate benefit package.

#1305 Michigan
Staff position, 400-bed teaching hospital, A-Z benefits package.

#1167 Michigan
Town of 100,000; 400-bed hospital Chief MDA a nice guy to deal with.

#1277 Wisconsin
Staff position, small hospital, 2 CRNAs, good autonomy, income exceeds prevailing rate. Paid interview and relocation.

Call toll free 1-800-426-7901

SOUTHWEST

#1273 Texas Gulf Coast
1 CRNA, 1 MDA; 5 minutes puts you at the sea shore, negotiable income plus benefits.

#1176 New Mexico
Small CRNA/MDA group, near mountains, new & well-equipped hospital.

#1268 New Mexico
Group, 3 CRNAs, 1 MDA; income negotiable, $1,000 CME stipend.

Call toll free 1-800-426-7901

SOUTHEAST

#1257 Virginia
120-bed hospital, 5 CRNAs do all anesthesia - spinals & epidurals.

#1264 Central Florida
3 CRNAs, 1 MDA; must function without close supervision, negotiable package.

Call toll free 1-800-426-7901

SOUTH CENTRAL

#1249 Tennessee
Staff - large hospital, 1 month vacation, paid interview and relocation.

#1233 Louisiana
Large CRNA/MDA group, stable; New equipment, wide variety of cases, $50 +.

APPENDIX C

Draft Legislation

A BILL

To authorize payment of a nurse accession bonus.

Be it enacted by the Senate and the House of Representatives of the United States of America, in Congress assembled: That (a) subject to subsection (2) of this Act an individual who is--

(1) commissioned as an officer of the Nurse Corps of the Army or Navy or an officer of the Air Force designated as a nurse or an officer designated as a nurse in the commissioned corps of the Public Health Service during the period beginning October 1, 1989 and ending September 30, 1990; and

(2) executes a written agreement to remain on active duty for a period of four years;

may be paid an incentive bonus in an amount determined by the Secretary concerned which amount shall not exceed $5,000.

(b) An officer is not eligible for an incentive bonus under subsection (a) of this Act unless the Secretary concerned determines that the officer is qualified as a nurse.

(c) An officer who receives payment under subsection (a) of this Act and who subsequently fails to become licensed as a professional registered nurse in any state of the United States before the end of the period for which payment was made shall be required to refund such payment.

(d) An officer who voluntarily terminates service on active duty before the end of the period for which payment was made to such officer under subsection (a) of this Act shall refund to the United States an amount that bears the same ratio to the amount paid to such officer as the unserved part of such period bears to the total period for which the payment was made.

(e) The provisions of title 37, United States Code, shall be applied in the administration of this with relation to definitions therein and general procedures for the payment of bonuses to members of the uniformed services.

A BILL

To amend title 37, United States Code, to authorize the payment of incentive special pay for certified registered nurse anesthetists in the Armed Forces.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled.

(1) by amending Chapter 5 of title 37, United States Code by inserting after 302c the following new section 302d:

"S. 302d. Special pay: nurse anesthetist

"(a)(1) Subject to paragraph (2) of this subsection and subsection (b) of this section, an individual who is commissioned as an officer and--

"(A) who is an officer of the Nurse Corps of the Army or the Navy or an officer of the Air Force designated as a nurse or an officer designated as a nurse in the commissioned corps of the Public Health Service; and

"(B) is a qualified certified registered nurse anesthetist, or a qualified nurse in a specialty designated as in critically short supply by the Secretary concerned; and

"(C) is on active duty under a call or order to active duty for a period of not less than one year;

may be paid incentive special pay, in an amount not to exceed $6,000 for any twelve-month period.

"(2) An officer eligible for incentive special pay under paragraph (1) of this subsection may also execute an agreement to remain on active duty for periods greater than twelve months. The Secretary concerned shall consider the length of service to which the officer has agreed in determining the amount to which the officer is paid.

"(b)(1) An officer may not be paid incentive special pay under subsection (a) of this section for any twelve-month period unless the officer first executes a written agreement under which the officer agrees to remain on active duty for a period of not less than one year beginning on the date the officer accepts the award for such incentive special pay.

"(2) Under regulations prescribed by the Secretary of Defense or the Secretary of Health and Human Services under section 303(a) of this title, an officer's entitlement to the incentive special pay authorized by subsection (a) of this section may be terminated at any time. If such entitlement is terminated, the officer concerned is entitled to be paid such incentive special pay only for the part of the period of active duty that he served and he may be required to refund any amount in excess of that entitlement.

"(c) Special pay payable to an officer under subsection (a) of this section shall be paid annually at the beginning of the twelve month period for which the officer is entitled to such payment.

"(d) An officer who voluntarily terminates service on active duty before the end of the period for which a payment was made to such officer under subsection (a) of this section shall refund to the United States an amount which bears the same ratio to the amount paid to such officer as the unserved part of such period bears to the total period for which the payment was made.".

Fred J. Huggins, MD
Larry H. Johnson, MD
Michael J. Young, MD
Gerald D. Boyles, MD

Northeast Arkansas
Anesthesiologists, P.A.

CRNA Salary & Benefits

Salary Information

Base pay: $45,500 for experienced qualified applicant.
1,500 signing bonus.

Overtime pay: $30.00/hour based on an average over a call period.
30.00/hour when called in on paid day off.

Call pay: $250/Saturday, Sunday, or Holiday call. Weekday call is shared equally with no extra compensation.

Compensatory time off after call: Day off after day of call if staffing is adequate. Friday and Saturday have no days off.

Benefits Information

Vacation: 30 days the first year plus one day for each year of service.

Sick leave: 6 days/year to accumulate to 30 days.

Total vacation/sick days = 36 days/year.

Long-term disability insurance: In effect January 1, 1989.

Health insurance: Premium paid by employer. Family coverage paid by employee.

Dental insurance: Premium paid by employer. Family coverage paid by employee.

Life insurance: Premium paid by employer.

Retirement plan: Contributions by employer. Approximately 10% gross salary.

Paid by employer: National AANA dues.
State license.
Professional liability insurance.
Interview expenses: individualized.
4 week sabbatical every 5 years of service--We encourage this time to be used for educational purposes.
CME allowance: $500 first year plus $100 for each year of service.

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APPENDIX D

Cost Data

Cost Data

Program	FY90	FY91
Nurse Accession Bonus[1]	$5.0M	
Certified Registered Nurse Anesthetists Incentive Special Pay	$3.0M	$3.0M

[1]. Cost data based on paying 1000 FY90 nurse corps accessions a $5,000 bonus.